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INFECTIOUS MONONUCLEOSIS.*

(GLANDULAR FEVER.)

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NEW ORLEANS.

In 1885, Philatow first made allusion to an idiopathic lymph adenopathy. After he recorded his observation, numerous articles on the subject appeared. In 1889, Pfeiffer described the condition as a new clinical entity under the name "Glandular Fever." In 1907, Turk described the adenopathy as accompanied by blood changes consisting essentially of lymphocytosis and the occurrence of peculiar abnormal white blood cells. Since that time, in England, on the Continent, and in this country numerous small outbreaks characterized by lymph adenopathy and changes in the mononuclear white blood cells have been described. At present, even though it is rather well established that there occurs a mononucleosis with lymph adenopathy, there is still considerable confusion regarding the exact status of the condition and the designation of glandular fever as a distinct entity is in some circles still considered dubious. Still the epidemiology, symptomatology and clinical features of glandular fever are fully enough described in the literature, even though the pathology of this alleged entity is unknown and its etiology not determined, to make it of interest to most physicians. My recent observation of four cases of glandular fever especially prompted this presentation.

*Read before the Louisiana State Medical Society, New Orleans, April 14-16, 1931.

BACTEROLOGY.

Various authors have reported the isolation of diphtheroid forms, of various staphylococci, of spirochetes and of fusiform organisms from glands removed aseptically from sufferers of the disease. Baldridge and his associates intensively studied numerous organisms so isolated and, after extensive agglutination and absorption reactions, concluded that the etiology of the condition is still unknown.

PATHOLOGY.

Since the disease is so rarely fatal, few observations of its pathology are recorded. Lymph glands removed from patients at varying intervals during the disease show marked lymphoid hyperplasia with compression of the sinuses and distention of the capsule. Some germinal centers show mitotic figures, as do some of the lining cells of the lymph sinuses and those in the cords of somatic cells. Occasional eosinophils can be noted. Marked irregularities in the nuclei of lining sinusoidal cells and lymphatic cord cells with lobulated and indented nuclei are common. There is usually no increase in the fibrous reticulum and no necrosis at any stage of the disease. Longcope, Sprunt and Evans point out the similarity of the lesions to those seen in Hodgkins disease. Accumulation of small lymphocytes as stressed by Downey is not a prominent feature as a rule.

EPIDEMIOLOGY.

Reports of epidemics of glandular fever, usually affecting children, are numerous. Thus Williams, Fisher, Jackson, Hesse, Korsakoff, Gilbert and Coleman, and Le-

mann have all reported outbreaks. It is extremely probable that during outbreaks many cases are so mild as to be unrecognized. Most authorities consider the faucial and pharyngeal tonsils as the portal of entry of the causal factor although some observations incriminate the gum margins or the gastro-intestinal tract as sources of the infection.

SYMPTOMATOLOGY, PHYSICAL OBSERVATION AND CLINICAL COURSE.

Fever, enlarged glands, headache, general malaise, large tender glands, and sore throat are the outstanding symptoms noted. These symptoms may manifest themselves in all degrees of severity. The only noteworthy physical observation as a rule is that of enlarged glands, these in the order of frequency being the post-cervical, axillary, sub-angular, sub-maxillary, inguinal, epitrochlear and sub-mental. The number and distribution of enlarged lymph glands is most valuable and, at times, it is necessary to institute most careful search in order to discover them, while in some cases the contour of the neck is entirely lost and the axillary spaces and groins are distended with masses of tremendously enlarged soft, tender glands. In some cases, the spleen or the liver is enlarged but in others neither one nor the other is enlarged. The syndrome is usually ushered in with high fever, generally of the septic type. Chills are common. Headache, prostration, nausea, vomiting, sweating, weakness and the other symptoms more or less common to all severe infections are prominent. In some cases the onset is with fever, sore throat and membraneous angina. In another type, the onset is with slight fever and slightly enlarged glands with no throat symptoms. Again the initial symptoms may be entirely absent with the glandular enlargement appearing later. Finally, there is a group of cases with insidious onset and mild symptomatology in whom enlarged and slightly tender glands are found only on extremely careful examination.

BLOOD CHANGES.

It is in the blood that the interesting abnormalities of glandular fever are found. As a rule, there is leukocytosis sometimes during the course of the disease, usually at its onset. In the vast majority of cases the increase is only moderate, usually not over 20,000 cells per cmm. Total white blood counts below the average are at times noted, especially during convalescence. The interesting features of the blood findings, however, are the character and number of the mononuclear cells encountered. American clinicians and hematologists, in contra-distinction to the German authorities, consider the mononucleosis as due to an absolute increase in lymphocytic cells many of which are forms not commonly seen in the blood of normal subjects. The mononucleosis gradually develops as the fever subsides. However, it must be noted that in many cases, especially during the course of epidemics, there is an initial polymorphonuclear increase. The abnormal mononuclear cells usually encountered vary in size from the ordinary small lymphocyte to cells that are even larger than that group ordinarily classed as endothelial leukocytes. The exact derivation of these cells is still under discussion, some believing that they are lymphogenic in origin, others considering them as endothelial or reticulo-endothelial in nature.

DIFFERENTIAL DIAGNOSIS.

The various modes of onset and the persistence of the enlarged glands are the factors mostly responsible for difficulty in diagnosis. The cases which present septic types of onset must be differentiated principally from acute leukemia (this at times being especially difficult), acute Hodgkins disease, miliary tuberculosis, influenza, dengue fever, and tularemia. Those cases associated with fever and membraneous angina may sometimes be mistaken for diphtheria, scarlet fever, Vincent's angina, and follicular tonsillitis. Cases with only moderate fever, tender glands and moderate constitu-

tional symptoms may be mistaken for typhoid fever and mumps. Those cases in which the adenopathy persists over a period of time must be differentiated from Hodgkin's disease, lympho-sarcoma, tuberculous adenitis, chronic lymphocytic leukemia and syphilis.

TREATMENT.

The treatment of glandular fever is symptomatic. Rest in bed is essential and isolation as completely as possible to prevent the spread of the infection should be instituted. The diet should be a light, easily digested one and liquids should be given freely. Local applications to the swollen glands are of little value. However, hot or cold applications are recommended by some and often give considerable relief. Sodium bicarbonate in proper doses should be administered. Many advise the use of antipyretics such as acetylsalicylic acid. Tepid sponges followed by alcohol rubs are helpful in cases with high temperature. During convalescence, fresh air and a well balanced diet are essential as the pationt is often depressed and usually has a lowered resistance. Iron and copper therapy is indicated with cases showing much secondary anemia.

SUMMARY.

Glandular fever is a fairly well defined symptom complex, infectious in origin, of unknown etiology, generally of short duration and characterized by fever and large lymph glands, sore throat and the occurrence of numerous abnormal blood cells. Neither the casual organism nor its portal of entry has been proved nor has the pathology been sufficiently studied, even though numerous descriptions of glands excised during the course of the disease appear in the literature. The symptomatology is similar to that of acute infectious disease. The only physical sign that may be of value in reaching a differential diagnosis is that of the enlarged tender gland usually occurring in the region of the neck. At the onset of the disease total leukocytic counts are usually above normal and below normal during convalescence. In some cases the increase in the polymorphonuclear leukocytes occurs at the onset. Sometimes during the course of the disease, the blood shows a rather marked increase in abnormal mononuclear cells, some of which abnormal cells are lymphoid in nature while others are monocytes or endothelial leukocytes. The diagnosis of glandular fever is often difficult because of its resemblance to other acute infections and because so very many mild cases are encountered. Even though the question of the symptom complex as a distinct entity remains open, the best name for the condition seems to be glandular fever.

DISCUSSION.

Dr. Chaillé Jamison (New Orleans): Infectious mononucleosis is important merely from the standpoint of being recognized and not confused with other far more dangerous syndromes.

We must remember, and often we remember it entirely too late, that infectious mononucleosis never kills. Therefore when we can make that diagnosis our prognosis is absolutely good.

I think a point that helps us in the recognition of this disease is that clinically, as a rule, the patient does not impress one as being very sick. We are very prone at the present time to put a great deal of reliance on laboratory findings, and you should be warned that the laboratory findings, in the disease are likely to be misleading and that we cannot lean upon them as we so often would like to do. In this day of biopsies it is quite common for us to remove large glands and remove them fairly promptly. I believe the pathologist will confirm my statement that it is extremely difficult to differentiate such glands from other diseases that might confuse us and that the biopsy, the histological study of the gland, does very little good.

The disease that we are most likely to confuse infectious mononucleosis with, I think, is acute lymphatic leukemia. That is certainly a serious error because in an acute lymphatic leukemia we have to give an absolutely bad prognosis for only a few weeks of life.

I think that only one or two points should be emphasized. First of all, the disease is not a serious one. The prognosis is absolutely good. The clinical appearance of the patient is not that of a person not seriously ill, and we should also bear in mind that the laboratory is very likely to actually mislead us. I have seen the diagnosis of leukemia made several times in this disease.

Dr. Rigney D'Aunoy (New Orleans): There is one point that I believe deserves repeated em-

phasis even though Dr. Hobson brought it out and Dr. Jamison stressed it, and that is the difficulty of arriving at a diagnosis of infectious mononucleosis especially in the early course of the disease, even though full use be made of hematological examinations.

It is a fact that fully twenty per cent of the cases, and especially but not exclusively the cases that have high temperature at the onset, will show an increase in the polymorphonuclear elements, the mononucleosis coming on later. Such cases are very prone to be, especially when they are sporadic cases, regarded as upper respiratory tract infections, the adenopathy supporting such a clinical diagnosis.

As to the derivation of the abnormal blood cells which we find at one time or another in the course of infectious mononucleosis, I believe we can safely say, even in spite of such helps as the oxydase reaction and McJunkin's and other staining methods, that we do not know with certainty where these cells come from. Personally, I think they come from two sources, being lymphogenic and endothelial or reticulo-endothelial in origin. I base that opinion on the fact that careful study of glands removed during the course of infectious mononucleosis will show that the germinal centers, as well as the lining endothelium of lymph spaces, show the cells which we recognize as more or less pathognomonic of infectious mononucleosis. However, the laboratory diagnosis is by no means simple and each case requires considerable study, and especially correlation with the clinical features presenting themselves during the course of the disease.

Dr. I. I. Lemann (New Orleans): Glandular fever occurs not only in epidemics but also in sporadic cases. It is chiefly in the latter that we are confronted with the difficulties in diagnosis that have been repeatedly stressed by the previous speakers. Some years ago I had an opportunity of observing a small epidemic. I have the impression that the disease has continued in an endemic form in the institution from which I reported the epidemic for one of our present fourth year medical students, resident in this institution, has told me that the boys in the orphanage continue to have adenopathy and to have from time to time small outbreaks of unexplained fever. This leads me to stress the fact that the adenopathy caused by glandular fever may continue fairly indefinitely. I took the opportunity of going over to the orphanage in which this epidemic had occurred, about a year later and made a survey of the boys at that time, the boys we had seen and the other boys. We were struck by the fact that a large majority of the boys had adenopathy. Practically all of the ones we had seen in their acute stages still had their enlarged glands. I think that is an important point because one might fear, on account of the persistance of the adenopathy, that we were dealing with some very severe disease.

Another point that I would like to emphasize is the varying blood picture. Some allusion has been made to that, but I think it deserves still further emphasis. I would say that there was no particularly characteristic blood picture. In a given patient it varies from a leukocytosis to leukopenia in the course of the same attack. In some cases we have the mononucleosis that has been referred to; in other cases, unless we happen to examine the blood at the particularly stage when the mononucleosis occurs, we may altogether miss it. It is my impression that if we are to make any progress in the study of the hematology of the disease we must make many blood counts throughout the attack, and then we shall probably find that there is a natural course from leukocytosis through normal to leukopenia, or perhaps the reverse. Some of these cases are characterized by fairly well marked eosinophilia. A recent sporadic case had an eosinophil count up to ninety per cent.

I am quite in accord with what Dr. Hobson and Dr. Jamison have told you, namely, that we are in very grave danger of mistaking this very mil and innocent disease for very serious blood dyscrasia, such as acute leukemia or Hodgkin's disease. We can only tell by the fact that these patients are not very ill, and that in the course of a few weeks they are entirely well.

Dr. J. N. Brown (Washington): I just want to say while this subject is being discussed that it has been my experience that 100 per cent of the Negro population of this state have enlarged lymphatic glands, and I want to say that I would guess, without any statistics or records, ninety per cent of the children of Louisiana have them.

I don't believe I have ever examined a child for any trouble that I didn't find enlarged lymphatic glands. I want to say that I believe about sixty per cent of the adults I examine have these enlarged glands.

I want to ask the essayist if we are justified in making a diagnosis of all these cases as mononucleosis.

Dr. W. S. Kerlin (Shreveport): About ten days ago a young man of about nineteen years came into the clinic with a history like this: Twenty-four hours preceding his consulting us he noticed pain and stiffness in the left side of his neck one morning. A few hours later he noticed an enlargement, and that was why he came to the clinic. On examination you could palpate the postcervical glands and the preauricular glands were palpable and enlarged. They were somewhat tender. There was an enlarged and tender

gland size of large marble in left neck. He also complained of some pain in his throat. The leukocyte count was about 13,000 with about forty-six per cent monocytes, that is, we took them to be monocytes.

We made a probable disagnosis of infectous mononucleosis, but left a loophole by stating we didn't know just what this condition could be and it might be confused with something more serious. We asked him to return the following day for follow up blood examinations, and he did so. The count was about the same as the preceding day. The following day there was decided change in the appearance of the white cells, taking on more the appearance of a leukemia of the myeloblastic type, the cells resembled very closely premyleocytes. The blood had taken on such a change that we felt we were probably dealing with a leukemia of the myeloblastic type. A skiagraph of the chest did not show any glandular enlargement.

We followed him up five or six days, and the blood then reverted back to the monocytic type.

As Dr. Jamison mentioned, we cannot be too sure about the diagnosis of these conditions, and the laboratory picture will confuse us quite frequently. I brought some of these slides down to Dr. Johns for his interpretation but I haven't heard from him yet.

NOTE—This case finally proved to be infectious mononucleosis. The white cells were perfectly normal at the end of three weeks and the cervical and axillary glands were normal at the end of one month.

Dr. Sam Hobson (closing): As Dr. Jamison said, it is a disease that is not fatal but a disease that sometimes has a rather long convalescence in that the glands do not clear up as early as the patient would like. I have a patient now who has been sick since December and still has a great deal of discomfort with these enlarged, swollen glands in the neck. He is better in every other way but these glands are still giving considerable trouble.

In answer to the doctor's question as to whether all cases of lymph adenopathy should be diagnosed infectious monoucleosis, in cases with the large glands the symptomatology and blood changes as outlined, I believe you are justified in making a diagnosis of infectious mononucleosis.

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RESULTS OF WORK DONE ON FRACTURES OF PATELLA FOR PAST THIRTY-SIX YEARS, WITH CONCLUSIONS.*

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Although I have devoted much time and work to this subject for the past thirty-six years, my first paper did not appear until 1900. No attempt will be made in this monograph to review this work in detail, nor that of other authors who have written extensively on this subject; nor will any effort be made to discuss the treatment of fractures of the patella, prior to the adoption of the open method, as all other procedures have become obsolete. It is understood, of course, that any physician should know how to apply a posterior splint and figure of eight bandage to be used until the case can be taken to a competent surgeon.

To properly treat fractures of the patella, the following facts must be borne in mind:

1. The patella, though a small sesamoid bone, plays a most important role in the movements of the knee joint and the stabilization of the leg. It is inserted into the fibres of the quadriceps tendon and patellar ligament, forming a fulcrum, and only when in perfect continuity is the integrity of the knee joint preserved.

2. The quadriceps, patella, and the ligament form a lever of the first degree; force is applied from the quadriceps through the patella as a fulcrum and the patella ligament which is attached to the weight or leg. The quadriceps femoris is composed of four muscles, the rectus femoris, the vastus externus, internus and crurerus, and is the strongest muscle in the body, capable of exerting a tremendous force.

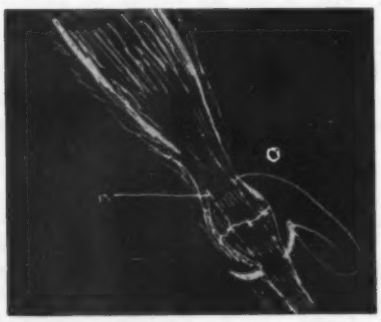

Fig. 1. Showing method of introducing wire—after suture of capsule.

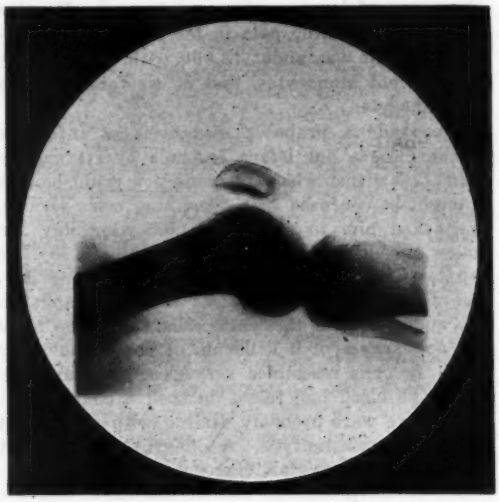

Fig 2. Result good—iron wire used. Taken 21 years after operation.

3. When the tendon of the quadriceps is ruptured at its insertion to the patella, or when the tear extends to its lateral fibers, with or without fracture of the patella, the use of the patella as a fulcrum is destroyed and the function of the knee joint is impaired in proportion to the separation of the fragments or the tilting of the patella. This fact has been recognized by many surgeons in the past but, so far as I can ascertain, has never been fully explained. Some state that it is only necessary to suture the lateral fibers of the ligament to hold the patella together. This is not correct, for this alone will not hold the fragments in close and firm apposition. Some form of fixation must be applied which will hold the fractured ends close, firm, and for an indefinite period of time while ossification is taking place.

4. Firm union requires several months, too long to depend upon absorbable sutures

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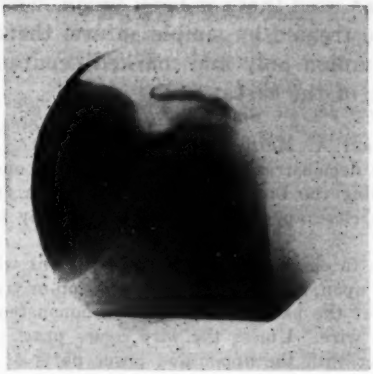

Fig. 3. Result good—iron wire used. Taken 22 years after operation.

which must be reinforced by external splints; silver wire, No. 20, the size used as a rule, is brittle and is capable of holding a load of 28 pounds only; copper wire is a little stronger, holding a load of 33 pounds; this too is brittle and will also break in the twisting. Annealed iron wire, No. 20, will hold a load of 78 pounds and is not brittle. This is the wire which should be used in all bone work.

5. As 65 per cent of all fractures recur within the first twelve months, the material used should last indefinitely, as the fragments of bone must be relieved of all strain until bony union has occurred. If ossification does not take place, the fibrous bands will stretch and finally so impair the use of the limb as to result in permanent partial disability.

6. The use of absorable or unreliable material of any kind, should be abandoned as it requires at least four months to insure bony union, and is even then doubtful, a refracture adding just so much more to the uncertainty of the time of convalescence.

With all these facts in mind, I finally worked out the following technic: As the fragments must be in perfect apposition and in the closest contact, open reduction is absolutely necessary. The approach is best made by a transverse incision over or near the line of fracture; clots removed, intervening soft tissue trimmed off, and the ligaments and capsule sutured with chromic gut and as snugly readjusted as possible, in order to place the fragments in normal position; this, of course, differs in no way from any method employed in open reduction.

In order to secure the position, and especially to maintain it, a fixation splint must be added. This is done by transfixing the quadriceps tendon and patella ligament, with a No. 16 annealed iron wire, introducing it as close to the patella as possible, bringing the ends together and tightened; a mattress suture is formed and the two sides of the wire lay across the top of the patella about ¾ of an inch apart; all of the slack is taken out of the wire by twisting (and there is no danger of breaking), the top edges of the patella are brought in the closest contact and the strain on the sutured ligament is taken up entirely by the wire, bridging over the injured parts which undergo a softening process while healing.

The advantages of this treatment are: First, the limb does not have to be immobilized; it is only necessary to apply a dressing, and, though I have done nothing more except keeping the patient in bed until the wound is healed, I find it more comfortable to suspend the limb as long as the patient is in bed, making his movements easier and more comfortable. At the end of two weeks the patient is allowed to walk around on crutches; this is continued as long as there is any soreness and the limb can be flexed to an angle of

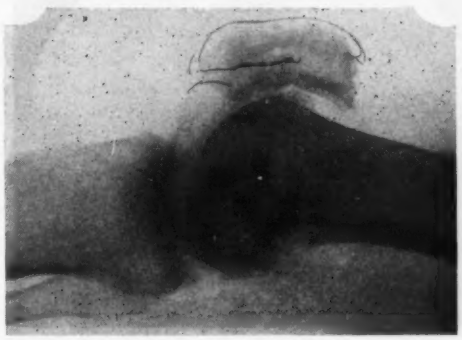

Fig. 4. Result fair—Silver wire, broke before union was firm.

110 degrees; this requires usually from four to six weeks. There is no doubt that the convalescent period is shortened at least half, the time depending upon the character of work to be done. In none of my cases have I used heat or massage, though of course this might help make the patient more comfortable. As the patella is free, with no pressure against the condyle, there is no danger of ankylosis, as was so common in the days when these fractures were treated by hyper-extension and figure eight bandages.

I know of only two cases in which there was not complete union of the fracture—one was a man who slipped two weeks after operation and a slight separation at the fracture line occurred, but this seemed in no way to impair the function of the knee. Another was reported as having fallen, causing the wire to tear through the ligament. In both instances, I am confident the wire was not passed deeply enough into the tendon and ligaments.

The reports from surgeons who have employed the method were so flattering, and my own experience so satisfactory, that I determined to bring the results before you tonight.

In the radiograms which I will now show you, note that in every case in which the wire was used there is bony union, wheras in those treated by simple suture, there is fibrous union only and marked separation in some of the cases.

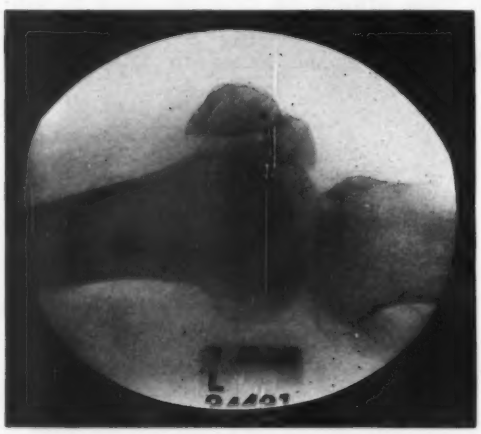

Fig. 5. Result taken six months after cat-gut suture—note separation.

DISCUSSION.

Dr. Paul A. McIlhenny (New Orleans): Dr. Martin's demonstration is a very practical one in establishing the fact of holding the patella fragments in close apposition with what we may term a brace.

I wish to emphasize the particular point which he dwelt upon, namely, the close insertion or transfixation of the patella tendon and common tendon with the wire. Unless the wire comes practically in contact with the upper and lower parts of the patella you may have a releasing or slacking in the wire after you have apparently attached it to the bone with sufficient tensity to bring the fragments into apposition. Another point which I feel should be brought out is that, after the wound has been closed, the leg should be braced. We use a splint, preferably a postrior gutter splint with the knee in slight flexion. There are two reasons for such a position: First, should there be slight separation of the fragments, such as Dr. Martin has demonstrated in his plates, some flexion of the knee will produce a slight tension in the quadriceps and the fragments of the patella will then be forced to greater apposition. The second reason is that, after immobilization has been kept up for two or more weeks, there will be certain contractions about the knee joint which will inhibit active motion or the restoration of active motion. With slight flexion in the knee you may then slowly extend and slowly flex without having the difficulty of having contractions which naturally take place when the knee has been dressed in full extension. I believe I prefer the maintenance of the flexed position with a posterior plaster splint because with such a dressing you may apply slight pressure. I believe also, that, after the wound has healed, gentle massage is indicated, and also a certain amount of physiotherapy. As far as light treatment is concerned, I prefer the infra-red light.

Certainly, fixation of the patella fragments by an unabsorbable material which will maintain the fragments in complete apposition, with which there is no chance of separation of the fragments, will insure a greater number of satisfactory results rather than an absorbable material, which at best cannot be relied upon and which may be absorbed before union has taken place and later require more work to repair something that might have been prevented.

Dr. E. D. Fenner (New Orleans): It seems to me that what Dr. Martin has stressed in his paper is, that, if you clean out the fibrous tissue and see there is no overlapping periosteum between the ends of the bone, then suture the fibrous capsule

and put the limb at rest for a sufficient length of time, you have a chance of getting bony union; but it is going to take six to eight weeks and during that time, you are relying simply upon absorbable material, there is a chance of the fragments being moved apart as a certain amount of relaxation is likely to occur.

If I understand Dr. Martin correctly, what he believes he has done by the introduction of the metal suture is that he introduces an interior splint which secures very firm apposition of the fragments; that it favors bony union; that it shortens the period during which it is necessary to keep the limb absolutely at rest, and makes his patient more comfortable and accomplishes a speedier return to work.

I confess I cannot contribute anything in the way of actual personal experience in the use of Dr. Martin's iron wire suture, but it appeals to me as being a common sense proposition.

I had the opportunity last week of seeing a patient, a negro man, whom I showed to every doctor I could come in contact with. The man came to my clinic because of chronic arthritis of the right knee and in examining him I discovered he had a fracture of the left patella. It had occurred thirty years ago and he had never been treated. There was a separation of about 3½ inches between the fragments. When the knee was flexed the condyles showed up through the skin.

He is an example of the capacity of the human being for adaptation. That man had been doing work of a day laborer for thirty years with that widely separated patella, and although he could not lift his knee and straighten his leg, it did not keep him from work a single day during that time.

Dr. J. A. Danna: I hesitate to get up and say a word of disagreement with my good friend Dr. Martin, but I am on record already and I do not want anybody to think I have changed my mind. Twenty-five years ago, I read a paper before this society describing five cases that had been treated by suturing of the capsule without any appliance to the patella itself, or any sort of supplementary splint such as Dr. Martin's. I have had a good many cases since, and I have used the same technique throughout and have yet to regret the fact. I must say, however, that I have been quite impressed with Dr. Martin's pictures of results. My own results, as far as I have been able to follow them, are just as good, but I do not believe that that kind of appliance in the average hands can get as good results as Dr. Martin gets. I dare say it is a good thing and probably no harm, but it appeals to me as being unnecessary, the use of metallic foreign body when you can get practically the same result by the use of absorbable material.

Dr. J. Birney Guthrie: At the request of Dr. Martin, I have brought here a patient whom he operated on four years ago. The patient has been carrying this iron wire and it has given him no trouble during the four years. He stayed in bed about seven days and wore no splint. I can give you a practical demonstration of the function of a limb operated on by the open method.

I do not think anyone would want to wear a splint the length of time necessary if he could get by by other methods. The iron wire may some day give trouble, but has not done so up to the present moment.

Dr. E. Denegre Martin (closing): I thank Dr. Fenner for clearing up some of the points I failed to explain, and Dr. Guthrie for a practical and personal demonstration.

I described this method with the use of annealed iron wire some thirty years ago. If Dr. Danna will make a roentgenogram of some of his cases a year after operation he will find the fragments separated and held by fibrous bands allowing the ends of the patella to drop and interferring with its function,—this is usually the case where absorbable sutures are used.

Sixty cases have been reported to me in which wire splinting was used and all had perfect results. It is proof against refracture, shortens convalesence and assures a perfect result.

ALLERGIC DISEASES, WITH SPECIAL REFERENCE TO THOSE INVOLVING THE RESPIRATORY TRACT.*

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Much controversy has prevailed lately concerning the terms allergy, anaphylaxis, idiosyncrasy, protein sensitization, hypersensitiveness and atopy. As pointed out in a previous article,[1] Kolmer[2] suggests that we adopt the term "allergy" and discard all others for the sake of simplicity and to avoid further confusion. We may do this for clinical purposes, yet appreciate the fact that, from a purely scientific viewpoint, there may be fundamental differences between anaphylaxis in the guinea-pig and an acquired sensitization or allergy in the human being. The following theory is very helpful in understanding allergy:

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-fourth Annual Session of the Mississippi State Medical Association, Jackson, May 12, 1931.

(a) Hay fever, asthma, certain dermatoses and certain affections of the mucous membranes of the gastro-intestinal tract are similar in nature, differing only in the kind and location of the cells involved.

(b) The symptoms are the result of an altered reactivity of these cells.

(c) This altered reactivity is due to a sensitization of these cells to substances which are harmless to normal individuals.

(d) This ability to become sensitive is, in most instances, an hereditary characteristic, though the actual sensitization is acquired.

The fact that some individuals exhibit symptoms upon the first ingestion of, or contact with, a particular substance need not confuse us if we accept the theory proposed by Ratner[3] that sensitization may be acquired in utero, or the theory suggested by Shannon,[4] that it may be acquired from minute amounts of protein obtained through breast milk.

CONDITIONS WHICH MAY BE ALLERGIC.

Hay fever and asthma are two of the outstanding allergic diseases. The symptoms of either, in typical attacks, are easily recognized. We deserve no credit, therefore, for a correct diagnosis in the majority of cases; it is essential, however, that we recognize the obscure and mild forms, as well as other types of allergy.

During the past ten years rapid progress has been made. The etiology, symptomatology and pathology of the allergic diseases are much better understood. Many conditions are now known to be allergic which formerly escaped detection. Some of these are presented in Table I. It is not contended by any means that allergy is always responsible for the conditions enumerated; we merely wish to emphasize the fact that allergy should be considered in the differential diagnosis, since it is more often responsible than is generally supposed. We may safely state that practically any portion of the body may be involved.

TABLE 1. CONDITIONS WHICH MAY BE ALLERGIC.

Group I. Head

1. Frequent "colds." Chronic "catarrh." Frequent sneezing attacks.
2. Non-suppurative or hyperplastic sinusitis. Allergic sinus disease with secondary infection.[5]
3. Headache, resembling migraine.[6]
4. Chronic or vernal conjunctivitis. Ulcers of lids or cornea.
5. Hay fever, perennial. Vasomotor rhinitis, with or without polypi and polypoid degeneration.
6. Hay fever, seasonal.
7. Itching of eyes, nose, palate or eustachian tubes.

Group II. Chest

1. Frequent chest "colds." Bronchitis with or without wheezing.
2. Cough, seasonal or chronic.
3. Croup. Edema of larynx and trachea.
4. Dyspnea, particularly that influenced by temperature changes.
5. Asthma.

Group III. Skin

1. Various dermatoses, particularly certain types of:
   (a) Dermatitis, acute, chronic or seasonal.
   (b) Eczema.[7]
   (c) Erythema, urticaria, angioneurotic edema.
   (d) Pruritis, with or without demonstrable lesions.[8]
   (e) Purpura.[9, 10, 11, 12]

Group IV. Gastro-Intestinal Tract

1. Swelling of lips or tongue, with or without itching.
2. Herpes labialis. "Canker sores" of mouth.[13]
3. Colic, infantile.[14]
4. Dyspepsia (loss of appetite, epigastric fullness, eructation, pain, cramping, nausea, vomiting, constipation, diarrhea with or without mucus or blood, pruritis ani).[15, 16]

Group V. Joints

1. Pain, often sudden in onset and disappearance, with or without swelling, heat and redness, involving the soft parts without bony changes.

Group VI. Miscellaneous

1. Genito-urinary manifestations.[17]
2. Attacks of loss of consciousness, resembling epilepsy at times.[18, 19]

HEREDITY.

When allergy is suspected, the influence of heredity should always be considered. Cooke[20] and others have stressed this fact. In a recent survey[1] of one hundred and twelve records of allergic children, below

the age of 17 years, we found that 91.06 per cent gave a history of some allergic condition among their antecedents (parents, uncles, aunts, grandparents or great grandparents).

Among a similar number of adults between the ages of 20 to 40 years, a positive family history was obtained in 70.5 per cent; between the ages of 40 to 60 years, 56.2 per cent gave positive histories. Without doubt the higher the incidence in the younger group was due to the fact that the family history was better known. The essential points to keep in mind concerning heredity may be summarized as follows:

1. Various types of allergy are interchangeable in the same or different generations. Specific hypersensitiveness is not inherited, but rather "the ability to become sensitive." A grandparent may have asthma, the parent urticaria, and the child abdominal allergy or migraine.

2. All members of one generation may escape but are capable of transmitting the tendency.

3. Symptoms appear earlier in a higher percentage of patients who give both a paternal and maternal family history of allergy.

4. When inheritance is unilateral, it comes from the father's side or mother's side in about equal proportion. Our statistics, in the series referred to, show 38.39 per cent paternal, 34.82 per cent maternal and 17.85 per cent bilateral.

5. A negative family history does not preclude the possibility of allergy.

6. The presence of some form of allergy among the antecedents is not essential for diagnosis, although it is distinctly helpful in doubtul cases.

7. The incidence of allergic conditions increases in proportion to the increase in population.

One of our patients is a member of the group shown in Chart I, taken from Smith's[21] article, "Occurrence of Hypersensitiveness or Allergy in Five Generations of One Family."

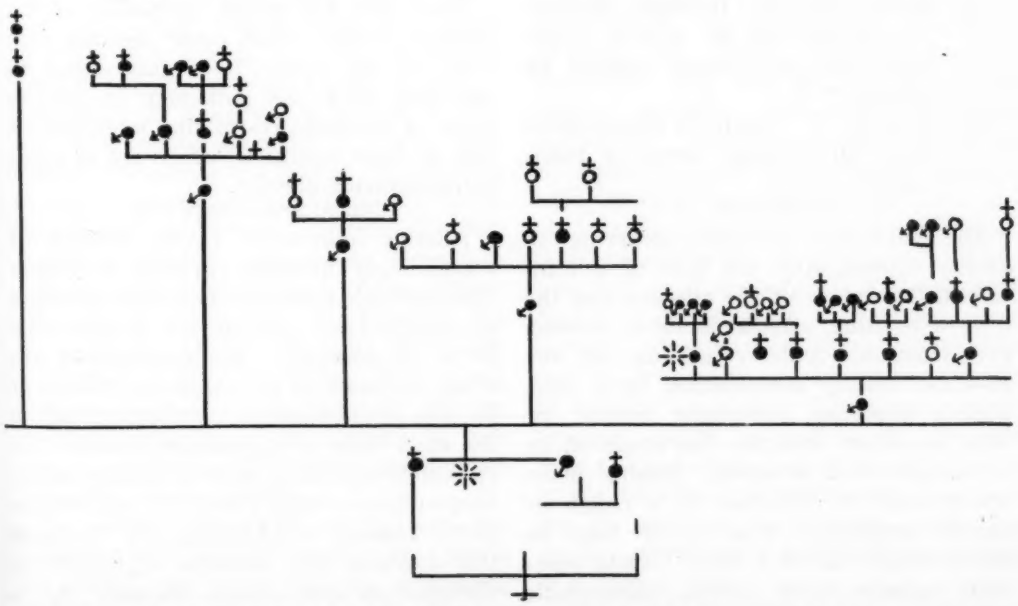

CHART 1. Cases of allergy in five generations of the E family. The black circles represent the hypersensitive persons affected by asthma, hay fever, vasomotor rhinitis, urticaria, angioneurotic edema or eczema.

HISTORY TAKING.

In taking the history of a suspected allergic condition, careful inquiry should be made concerning certain details. Allergic symptoms, particularly those of the respiratory tract, are usually influenced by one or more of the following:

1. Temperature changes (humidity, heat, cold).
2. Diet (over-eating, food dislikes, qualitative food dyspepsia).
3. Exercise.
4. Dust (house, road, occupational, ashes).
5. Smoke (coal, tobacco).
6. Volatile oils and odors (paint, insect sprays, cooking).
7. Drugs and powders (aspirin, quinine, orris root, sulphur, pyrethrum).
8. Diurnal and nocturnal variations.
9. Seasonal variations.
10. Locality.
11. Animal emanations.
12. Pollens (trees, weeds, grasses, flowers).
13. Psychic and emotional disturbances (fear, anger, laughter, sexual).
14. Other diseases (allergic diseases are aggravated by certain infections and temporarily relieved by others).[22, 23]
15. History of "failure to obtain relief from all previous forms of treatment."

PATHOLOGY.

The pathologic changes occurring in allergy depend upon the type of cell involved, the nature of the allergen and the type of reaction, whether acute or chronic. For example, acute conditions in the nose are usually accompanied by a thin, watery secretion containing mucus or, when secondary infection has occurred, by a mucopurulent secretion. Itching often accompanies the reaction to a pollen or animal emanation, whereas it may be absent when due to a food. Acute reactions usually show edema, eosinophilic infiltration and a rather characteristic pinkish gray membrane. Chronic irritation produces a pale gray membrane and is often associated with polypi or polypoid degeneration.

In the skin, acute lesions may consist of erythema only (rash) or of erythema and exudation of serum with edema (hive). Chronic conditions are more likely to resemble the picture described as eczema. Attacks of dermatitis, acute or chronic, which differs from both the above, are also frequently allergic.

Much the same pathology prevails in abdominal allergy. Laparotomies for acute conditions have revealed a local or generalized edema of the intestinal tract. Later, with a clue to the pathology, the true cause of the attack has been ascertained. Recently a surgeon related such an instance. A preoperative diagnosis of acute appendicitis was made. On opening the abdomen, he found a normal appendix. Practically all the small intestine was edematous and it was subsequently proved that the attack was due to the ingestion of honey. It can be truthfuly said that allergy may simulate almost any form of abdominal pathology.

Time does not permit discussion of the various changes which occur in other portions of the body. It is interesting to speculate upon the pathology in certain types of headache resembling migraine, as well as other conditions which are at times unquestionably allergic.

THE ALLERGIC INDIVIDUAL.

Allergic individuals, in the absence of complicating diseases, present a rather characteristic makeup. The blood pressure is usually low: 110 to 115 systolic and 70 to 80 diastolic. The eosinophiles are often increased in the blood and tissues at the site of the reaction, particularly during the stage when symptoms are present. The vasomotor system is more or less unstable; frequently the vagal autonomic and sympathetic systems are unbalanced. Perhaps this explains the influence of emotional disturbances upon allergic diseases. Allergic persons, as a whole, are energetic and above the average in intelligence; they are

also of the excitable type. In this connection, it is interesting to note that allergy in pure negroes is infrequent. Balyeat[24] has stated that allergic patients withstand intercurrent diseases well, which may be related to the habit of more or less constant antibody formation. Among our patients, such diseases as nephritis, hyperthyroidism, and diabetes have been strikingly uncommon. Nor does asthma, in our experience, predispose to tuberculosis.

SINUSES AND ALLERGY.

A roentgen ray examination was recently made of a series of two hundred patients with various forms of allergic rhinitis or asthma, or both; of these, one hundred and fifty-seven (78.5 per cent) showed some degree of cloudiness in one or more sinuses. It is generally believed such findings are due to the fact that the cells in these membranes are sensitive, as are those in the nose or bronchial tubes. The characteristic edema, cellular infiltration and polypoid formations occur after contact with various allergens. Secondary infection may then take place, aggravating the allergic condition. Primarily, we believe that sinus changes are more often the result of allergy rather than the cause. Proetz[25] has shown that an apparently normal antrum membrane may increase a centimeter in thickness following inhalation of a specific allergen. We have other reasons for concluding that in the majority of cases sinus involvement is an end result in allergic individuals. One is the fact that many allergic patients are completely relieved without treatment of the sinuses after desensitization or avoidance of the allergens to which they are specifically sensitive. Follow up studies have shown that in some of these cases the sinuses clear up, whereas others continue to cast opaque shadows on transillumination or roentgen ray examination.

In stating that sinus changes are the result rather than the cause of allergic conditions, we would like to emphasize that we are speaking specifically of those changes which are characteristically produced by allergy. Sinus disease due primarily to infection in non-allergic persons is a different matter, as is secondary infection complicating allergic sinuses. Inability to demonstrate a sensitization by skin tests in the past no doubt accounts for the belief that nasal and sinus pathology is responsible for hay fever and asthma. Since skin testing has become better understood and materials and methods have been improved, one seldom fails to obtain positive reactions if testing has been thorough.

INFLUENCE OF TEMPERATURE CHANGES, INFECTION AND OTHER NON-SPECIFIC FACTORS.

This subject merits discussion on account of the well known influence of temperature changes on allergic diseases of the respiratory tract. In our opinion, this is best explained by the following theory: allergic membranes are sensitive membranes. When in contact with various allergens, whether from without (pollens, animal emanations) or within (foods), these membranes are congested, as mentioned under pathology. In this condition, cold air, changes in humidity, increase in body temperature, changing from an environment of one temperature to that of another, and various other changes to which the body may be subjected, cause further irritation and edema of these membranes. For example, in the presence of perennial hay fever, many patients suffer from blockage of the nose or sneezing attacks upon arising in the morning; this is caused by the change from the warm temperature of the bed to that of the room. Again, the changes in temperature after sundown offer the most logical explanation for the frequency and increased severity of asthma at night. Since temperature changes cannot be prevented, the only hope of overcoming this situation is appropriate treatment directed toward removing the cause of the original congestion, thereby allowing the membranes to return to a normal state.

Relief may be obtained on moving from one house to another in the same locality

by the elimination or avoidance of a particular allergen. Patients who obtain relief following removal to a more favorable climate do so by the elimination of an allergen to which they are specifically sensitive or they may continue to come in contact with allergens which produce only congestion; they remain free of symptoms, however, because of relief from unfavorable atmospheric changes.

In addition to the above, the majority of allergic individuals are affected by various other non-specific factors, particularly focal infection, infectious "colds" and other pathologic conditions which further irritate the membranes or lower body resistance. Frequent "colds" are often regarded as the primary cause of asthmatic attacks when, as a matter of fact, contact with specific allergens produces congestion of the membrane; this, in turn, renders these membranes susceptible to colds which are secondary and non-specific. To illustrate: the father of an asthmatic child stated, "This child never has asthma unless he takes a 'cold' but he takes a 'cold' every two weeks." After being tested and offending allergens removed from his environment, this child has had only one attack of asthma in two years, which was due to circumstances that might have been avoided.

It is true that removal of diseased tonsils and other foci of infection will occasionally relieve an allergic condition. Every patient has a certain tolerance or threshold and usually only mild cases are relieved by such procedures alone. The allergic state has not been removed and frequently these patients exhibit symptoms later.

SKIN TESTS.

We continue to hear diverse opinions regarding the value of skin tests. At one extreme are those who, lacking experience, expect too much; when good results are not promptly forthcoming, they condemn the entire procedure as worthless. At the other extreme are those who, being over-enthusiastic, form a hasty opinion based on skin reactions alone, and make no attempt to correlate the findings with the history. This situation is regrettable. Skin tests occupy a very definite place in medicine and should be properly evaluated. Progress is being made in this, as in other fields, but we realize that much is yet to be learned.

During the past three years we have examined one thousand patients with various allergic manifestations, and in the course of our investigations have applied approximately two hundred ten thousand skin tests, or an average of two hundred ten tests per patient. As a rule, five hundred tests are made for asthma or perennial hay fever, whereas for seasonal hay fever only about half that number are necessary. If migraine, urticaria, eczema, or abdominal symptoms are present, the number of tests required depends upon the age, diet, and history of the patient.

The application of skin tests is a fairly simple laboratory procedure. The selection and preparation of proper testing materials, the various methods of testing, and the interpretation of reactions, however, involve a number of problems worthy of discussion.

METHODS OF APPLYING SKIN TESTS.

The relative value of the scratch and intradermal tests is still a matter of controversy. The scratch tests are easier to perform. As a rule, pollens applied by this method give good reactions in seasonal hay fever sufferers. In other conditions, particularly asthma, scratch tests are frequently negative and therefore are not dependable; intradermal tests with the same products may give strongly positive reactions. However, in view of the fact that intradermal tests are not without danger unless preceded by negative or doubtful scratch tests, it appears inadvisable to employ either the one or the other alone. Nor should intradermal tests be made with certain highly toxic substances, as flaxseed, glue, castor bean dust, and a few others. Fatalities have been reported

following failure to observe these precautions.

In certain conditions, as eczema, the method of choice, particularly for external irritants, is the application of the so-called "patch" or "contact" test for a period of twenty-four hours.

Tests by passive transfer are sometimes advisable in very young children, in the aged, in bedridden patients, in those with extensive skin affections, or in cases where other methods are contraindicated.

GRADING OF TESTS.

The grading of tests is largely a matter of personal opinion. Any test which shows more than a negative reaction may be considered positive. As a rule, erythema alone is graded one plus; erythema with slight wheal formation, two plus; and erythema with pronounced wheal formation, three or four plus, according to the amount of reaction and the presence of itching or pseudopodia. This method of grading, although satisfactory for individual work, does not conform to any standard. For the benefit of those patients who are referred from one physician to another, it would be well if some system of measuring erythema and wheal formation in millimeters and centimeters were universally adopted. In this way, the reaction might be visualized.

However, since the capacity to react is not equal in all skin cells, and since the same products cause dissimilar reactions in different areas of the body, no standard can be applicable in every case. Further, some products which give small reactions may be more important etiologic factors than others which cause larger reactions. It is well, therefore, to record any reaction varying from the normal; its role as a possible factor may then be proved by further developments.

INTERPRETATION OF TESTS.

Our most difficult problem is the interpretation of tests. We must first consider that positive skin reactions may represent future, present or past history; a positive reaction merely offers a clue for further investigation. To illustrate: seasonal hay fever sufferers may show positive reactions to pollens which are in no way related to the symptoms. The reactions, therefore, must be correlated with the history. For this purpose, an accurate knowledge of the pollinating season of all potential hay fever plants which may have produced reactions is essential.

Positive reactions to pollens without the appearance of symptoms need not confuse us. These reactions indicate an inherited ability of the patient to become sensitized to these pollens, and symptoms may develop only after long continued exposure. Fall hay fever sufferers who strongly react to trees or grasses or both, yet have no symptoms in the spring, are likely to develop symptoms later at this season of the year.

Several years ago we tested a small boy whose chief complaint was "sinus trouble," frequent "colds," and a daily rise of temperature. The presence of allergy on the paternal side of the family was revealed. Taking this into consideration, as well as the fact that various forms of treatment, including intranasal windows, had been of no avail, allergy was strongly suspected. Complete tests with one hundred and fifty foods, ninety pollens, fifty animal epithelials and miscellaneous products caused reactions from several in each group. Following treatment, all symptoms of which he complained disappeared. One year later the patient had a severe attack of asthma upon exposure to pyrethrum. This substance had produced a positive reaction in our tests, demonstrating, we believe, that we were dealing with a potential asthmatic from the beginning.

Positive reactions, particularly to foods, may represent an allergic condition which has existed in the past, although desensitization to these products may have taken place. Children and young adults who have had eczema, urticaria, or colitis in earlier life may strongly react to as many as thirty or forty foods, yet may be able

to ingest with impunity several or all of these foods at the time of examination.

We recently examined a physician whose chief complaint was dyspnea. Members of his family had asthma, and he hoped his own trouble was asthmatic, rather than cardiac, in origin. At his request, various tests were made. Only foods gave positive reactions, and these seemed unrelated to the dyspnea. On closer questioning, it was found that he had had severe urticaria ten years earlier. Although some of these foods had doubtless been responsible for the urticaria, desensitization had apparently taken place.

It is well known that persons are sensitive in varying degrees to different substances. One may be so mildly sensitive to feathers, for example, that contact will merely produce congestion or evidence of a cold.

Another fact to be remembered is that symptoms may appear only after continual contact for a period of several days and may persist for several days after contact has been broken. The following case report is an illustration:

Mrs. B. M. was tested in October, 1929, on account of hay fever and asthma. She reacted very strongly to feathers, but only mildly to Kapok. On removal of feathers and other offending substances from her environment, the symptoms disappeared. Later, she was advised to try a Kapok pillow; after sleeping on such a pillow for three nights, hay fever and asthma returned. Although the pillow was then removed, symptoms continued for ten days. Following this, she was free of symptoms until the Kapok pillow was resumed. Symptoms appeared again on the fifth night and became progressively worse each night until the pillow was finally discarded .

A similar case is that of Miss M. W., who has urticaria after ingestion of Irish potato. If it is taken in moderate quantity only once or twice each week, no symptoms develop, but if taken on several consecutive days, urticaria follows.

Obviously, the interpretation and evaluation of tests is a complicated study. Unless the information obtained is used discriminately and intelligently, needless restrictions will be imposed upon the patients. It is inexcusable to tell patients that, on account of their positive reactions, certain foods must never be taken. We are justified only in explaining the possibilities and endeavoring to secure the cooperation of patients in discontinuing entirely all positive foods for a trial period so their effect upon the symptoms may be carefully noted. Patients should be cautioned against merely "cutting down" the quantity or taking combinations containing traces of forbidden foods.

The plan of discarding one food at a time is not likely to meet with success. Should two or more be factors and only one be discontinued, the others may cause symptoms to persist.

If symptoms are relieved, one food should be added to the diet at intervals. In this way, the food or foods responsible for symptoms may be detected and, if necessary, permanently discontinued. All foods should first be resumed in small amounts; if no harmful effects are observed, the amounts may be gradually increased. One may determine whether elimination should be permanent or whether desensitization may be accomplished by a period of total abstinence, followed by resumption in gradually increased quantities. Those foods which have no ill effect on being added to the diet may be permanently resumed.

Thus far, we have discussed only positive reactions, but we must not overlook the fact that negative reactions may be obtained to substances which are clinically positive. Fortunately, the improved methods of testing result in fewer negative reactions; however, when they do occur and foods are suspected, one must depend upon elimination diets.

If negative reactions are obtained in a seasonal hay fever sufferer, the history of place, time of onset, and duration of symptoms is most important. Pollens are not always responsible for seasonal hay fever; it may be caused by a food in season or by contact with animal hairs or other substances.

When dealing with asthma in the absence of positive tests, a complete record

is essential. This should include a history of the attack in its relation to foods, contact with animals, season of the year, diurnal and nocturnal variations, and environment, as well as other aspects of the case as a whole. One having experience with many asthmatics may often eliminate causative agents which escape the notice of one unaware of the importance of learning every fact which may have a bearing on the case.

It must also be remembered that valuable information obtained from skin tests may be completely set at naught if one fails to consider certain non-specific factors, as variations in temperature, humidity, fatigue, dietary indiscretions, undue exercise, and dusts of cotton gins, corn cribs, ashes, and coal smoke, as well as other dusts and certain penetrating odors, which may irritate congested mucous membranes and aggravate the allergic condition. Obviously, any pathologic condition should also be taken into consideration.

If medicinal agents are suspected, one must rely almost entirely on the history for diagnosis. Scratch tests with certain drugs, as aspirin and quinine, seldom, if ever, produce reactions, yet violent symptoms may follow the ingestion of minute quantities of these drugs. Other drugs, as morphine, frequently produce non-specific reactions.

The interpretation of skin reactions becomes less difficult as one's experience increases. A problem which seems to confuse many observers is the response of certain allergic persons to practically all tests. In some instances, these patients have been designated "freaks" and no treatment has been attempted. If a large number of substances react, those which are etiologic factors may be determined if observation is carried out as follows: first, those products which react at once should be noted. Later, wheals may appear in practically all test sites; these are unimportant and should be disregarded. After several hours it will be found that the non-specific reactions have faded, whereas those of clinical consequence will show erythema, edema and heat.

Twenty-four hour observation of tests is also important; certain substances may not show positive reactions until the expiration of that time. Important information is sometimes overlooked if this procedure is not carried out.

Skin tests are indispensable as diagnostic agents. In order to realize their full value, however, experience and continuous study of the various methods of testing, preparation of materials, and evaluation of reactions is essential. Furthermore, tests must be carried out with thoroughness in every case; the practice of selecting at random a few materials and applying them by the scratch method alone is to be avoided. Without a comprehensive knowledge of the possibilities and limitations involved, failure and disappointment are inevitable.

TREATMENT.

The purpose of this paper is to discuss allergy in general; for this reason no attempt to describe treatment in detail will be made. It is obvious, from all that has been said, that the prime object of specific therapy is first to determine, by skin tests or history, those allergens responsible for symptoms. After this, it is essential that the patient avoid, or eliminate from his environment, all products which can be dealt with in this manner. He must be desensitized to products, such as windborne pollens, which are unavoidable. For example, an asthmatic who has symptoms each year from February until June may show positive reactions to the pollens of several trees, spring grasses, feathers, house dust, a few foods and miscellaneous substances. On account of the seasonal occurrence of symptoms, it is obvious that pollens are primary factors. The history indicates that other products are incapable of initiating attacks but, after symptoms have been established, they can definitely aggravate the condition. As described in a previous article,[26] incomplete testing with

failure to take into consideration these secondary factors is often responsible for poor results.

In addition to specific therapy, ephedrin and adrenalin probably occupy first place in the prevention or relief of attacks. Other remedies, too numerous to mention, are of value in selected cases.

In regard to the surgical treatment of the nose and sinuses, Hansel[27] in a recent report has discussed this problem at length and has given a comprehensive review of the literature on the subject. He quotes Rackemann and Tobey[28] who observed 1,074 patients with bronchial asthma. They attempted to determine the part played by focal infections and other disturbances in the nose and throat and stated that drainage of infected sinuses or the removal of polypi brought temporary relief and general improvement to a large number of patients. In only 5 per cent of the patients operated upon was asthma permanently eliminated. Hansel concludes, in part, as follows:

"The part played by bacteria as etiologic factors in nasal allergy has not been proved, and the general consensus of opinion is that bacteria are secondary invaders.

"Nonsuppurative or hyperplastic sinusitis should be considered as allergic sinus disease until proved otherwise.

"Allergic sinus disease with or without secondary infection should be differentiated from primary sinus infection with edema, hyperplasia or polypi.

"Allergic nasal and sinus disease should be treated conservatively and in conjunction with the treatment for the allergy.

"Surgical intervention is frequently indicated to restore function and eliminate infecton."

The experiences of Rackemann and Tobey, like Hansel's have been identical to ours.

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DISCUSSION.

Dr. B. S. Guyton (Oxford): It so happens I have had asthma all my life and I am naturally interested in this subject. I have been a great deal better the last few years, but since I am doing eye, ear, nose and throat work, I have been more interested in this subject from the stand point of a rhinologist. Doctor Henry kindly sent me a copy of his paper many days ago. As a rhinologist I am most interested in the nasal conditions and operative conditions.

It is my impression the majority of allergic patient seeks relief from the rhinologist before reaching the allergist. With this in mind, more than a year ago, I addressed to each member of the American Association for the Study of Allergy a questionnaire containing these three questions:

Approximately what per cent of your new patients have had operations on the nose?

What percentage of these were improved by the operation?

Have you seen any cases where they were made worse by nasal operations?

The responses were splendid. I received 65 replies. A few were so indefinite I could not use their material. Fifty-two expressed rather definite opinions without, however, giving exact data. From these 52 replies I have made, in substance, a summary based on the average of figures mentioned in their letters.

Replies to the first question ranged from two to practically 100 per cent, with more than 40 per cent as the average. More than 40 per cent of the cases going to these allergists had had operations on the nose.

Regarding the question how many had been improved the answers ranged from none to 33 per cent. Part of those answering there was an improvement stated it was only temporary. Thirty-three answered they have seen cases made worse, that is 33 out of 52. Several mentioned cases who had formerly only hay fever and became asthmatic after operation. One reported a physician having asthma following a nose operation. Another mentioned asthma in four cases following tonsil operations. Several of the answers said, in substance, most of their referred cases came from rhinologists and naturally they saw only the failures and the cast-offs of the rhinologist.

The reaction from operations on the nose in allergic cases are very grave. The swelling lasts a long time, and all too often, in the end, the conditions are no better and perhaps worse than in the beginning.

Only marked conditions can justify an operation and even then only the most conservative work should be done.

Dr. J. C. Pegues (Greenville): After hearing such a masterful discussion of allergy, one is tempted to ask if all inflammatory diseases are not more or less allergic. Like Dr. Henry, I think it our business, however, to be a little bit conservative.

In studying the case records of our allergic department, we find our asthma advancing. Two years ago when we first became especially interested in hay fever and sinus we were so sure many of our sinus cases were allergic we rushed into allergical treatment first shot on any sinus case, and the patient would return with the same old infected sinus. Now, I don't mean by that we don't have sinus caused from allergy. We feel sure that some of our typical sinus cases were allergic. We attempted to cure our asthma allergically. We tested and retested and some cases responded beautifully and some cases would not respond. Our percentage of relief was about the same as usual.

Now, the question which we put to ourselves is, why do not all asthma cases respond to treatment if they are all allergic? One of two or three things might occur. In testing out an allergic case sometimes we get a patient that has had some adrenalin or ephedrin, may be the night before or maybe that morning and in that case they are not likely to show up all the tests, and it is a good idea to have them stay two or three days so you can watch them and keep out these asthmatic cures and hay fever cures so you can test them allergically.

Another question that occurred to us was, were asthmatic cases typically allergic, and, of course, we haven't answered that absolutely satisfactorily to ourselves, but we did connect a little closer on that. We believe in asthma and hay fever cases, as in any chronic disease, you have got to eliminate all foci of infection and any disease anywhere you find it. If there are infected teeth, that is sapping the vitality of the patient, if there is an infected tooth or an infected sinus that is not draining properly, the conditions will not clear up properly under your allergic treatment. If you have an old, infected antrum that is not draining properly you are going to have an old chronic asthmatic case right along.

In looking over our records we find about half of our asthma patients came in with sinus trouble and we got the best results in those cases that had maxillary sinusitis.

Dr. Edley H. Jones (Vicksburg): This subject of allergy is quite important and in all probability

will be still more important in the future, and perhaps the immediate future, to the medical profession.

Doctor Henry, in his paper, in a few condensed pages, has given an outline of the disease, methods of diagnosis, and of treatment that will certainly be worth every one's careful study.

I said this is going to be a most important study. That is for two reasons. It opens some means of relief to a great many patients who have heretofore had very little relief. In the past we have been able to diagnose hay fever and asthma and to do a little for them, but the most we have been able to do for them is to sympathize. By this allergic treatment a large per cent of these patients can get relief. Don't expect 100 per cent relief. The pendulum swings to and fro. We can catch one extreme or the other. Don't consider every case that comes in as an allergic case, or you will be doomed to disappointment.

The second reason this is going to be important is that it is estimated that some seven per cent of our population is affected with some form of allergy, and this number had been increasing. Therefore, it is quite reasonable to think that this number will increase as time goes on.

There is one other thing that I would like to call attention to in connection with the treatment and that is that acid is beneficial in many of these cases.

Dr. N. C. Womack: (Jackson). This subject so admirably covered by Dr. Henry is a big subject and is getting bigger all the time. It concerns pediatricians as much as any one thing we have to deal with. When we have three months colic, or six months colic, or nine months colic, it is probably allergic. In eczema and asthma it is our most difficult problem. We are learning more all the time of allergy. We have not yet, and the doctors will agree with us I know, gotten to a definite basis. It is a matter that requires a good deal of understanding of all the conditions underlying. For instance, a child will be allergic to milk at one time and at another time will not be. The doctrine, first, of focal infection is waived. Bacteria, you must remember, will produce allergy just as will protein. I have seen children that would swell up with edema on milk when they were raised on milk. I know of no way except to go back to the diet of that animal which produced the milk. In eating it may have gotten hold of some particular thing the child happens to be sensitive to.

This is a paper we will all do well to take and read and ponder and remember in dealing with this condition in our private practice. We will make the diagnosis; we will eliminate those things the child is sensitive to, get rid of all focal infection, and get rid of the things that deplete the system and finally it is a matter that will have to be referred to the man who does that particular kind of work.

Dr. I. W. Barrett, (Memphis, Tenn.): There is just one thing I would like to call attention to, regardless of what specialty you are interested in. There are certain drugs that allergic individuals tolerate badly, narcotics, especially the opium derivatives, and that should be considered every time if you have a history of allergy in the treatment of any condition.

Dr. G. E. Adkins, (Jackson): Allergy is apparently a vaso-motor dilatation. It may take place in the skin, it may take place in the mucous membranes, or even in the interior of the body, and that has to be brought about by some chemical substance that produces this vaso-motor dilatation. It can be offset by adrenalin or ephedrin temporarily and then we have our vaso-motor dilatation again. Certainly, then, it must be a chemical reaction in the body that may be limited to certain cells of the body; it also may be common to the fluids of the body. It is one disease we do not have until an antibody has gotten into the human body. It reverses all types of immunity. Some man has well said that the trays must be taken up and stood on end and heated before allergy is to be understood. It is not inherent. The tendency is inherent but human beings do not inherit an antibody. They have to acquire that. The tedency can be inherited, and as long as it is inherited more frequently from the paternal side, and families are raised more frequently in the paternal location than in the material location, I am wondering again if it is not like tuberculosis and acquired from the same surroundings. It must be gotten into the circulation and I think it has been designated as an allergen, and they can find it in the tissues nowhere, but when it comes in contact with the agent that has been designated as allergen it produces this vaso-motor dilatation.

As to the operative conditions; allergy is no contra-indication to an operation; rather is it an indication. If an allergic patient has an infection or some condition that must be removed by an operation, it is no contra-indication to it. It is an indication for due precaution. But to operate on an allergc sinus will only result in a more pronounced reaction; it will bring you more of a vaso-motor dilatation there.

I find in my younger cases that roentgen ray and my trans-illuminator will not always give me a clear picture of the sinus, but if that patient has gone on and passed half of his life, these sinuses will show up very clearly, leading me to believe in after life there comes an atrophy rather than a dilatation.

Dr. Henry (closing): I want to thank the gentlemen who have discussed this paper. The subject of allergy is so large that it is impossible to discuss many of the phases which I would like to have mentioned. In this presentation I have endeavored to bring out the following points:

1. The theory of allergy.
2. The many conditions which may be allergic.
3. The importance of heredity.
4. The importance of a careful history.
5. Pathology of allergy.
6. The characteristics of the allergic individual.
7. The fact that sinus involvement is due to a sensitization of the sinus mucous membranes and therefore not the cause of nasal or bronchial allergy.
8. The part played by temperature changes, infections, climate, change of location, and other non-specific factors.
9. The importance of both the scratch and intradermal tests together with the grading and interpretation of the reactions.
10. The prime object of specific treatment.

Dr. Guyton, a victim of asthma, has summed up very well, I think, what our attitude should be toward surgery. If one continues to regard edema of the sinus mucous membranes which has been produced by a specific sensitization, with or without infection, as the cause of asthma, and attempts to cure asthma by surgery alone, failure to relieve will result in 95 per cent of the cases.

Dr. Atkins said that allergic pathology can be offset by adrenalin or ephedrine temporarily. This is quite true but the purpose of this paper is an attempt to show that the reason for thorough allergic investigation and treatment is to ascertain and remove offending allergens in order that permanent relief may be obtained in a high percentage of cases without having to resort to the constant use of such drugs.

PAINFUL FEET.*

EARL HYMAN, M. D.,†
NEW ORLEANS.

One of the most annoying, and frequently disabling, conditions to which mankind is heir is foot pain. An idea of the relative frequency of the condition can easily be had if one only notes the great number of advertisement of various patent appliances, special shoes, arch plates, and the like, each calculated to cure some particular type of foot ailment.

If one steps into a shoe store and complains of the feet he is immediately offered the type of foot apparatus that this store happens to be agent for, and knowing no better the advice is accepted.

Needless to say, an incalculable amount of damage is thus done; proper treatment being postponed, sometimes, until advanced structural changes have taken place.

Doctors themselves are very prone to treat foot complaints too lightly, and will frequently refer a patient with painful feet to a shoe store, or possibly a brace shop, instead of attempting to diagnose the trouble themselves, or sending the patient to someone they know to be competent. When one considers the vast army of people suffering with foot ailments, to whom the feet are most essential in pursuing their daily occupations, this can readily be seen to be a serious matter.

In order to better appreciate the prevention and proper treatment of painful feet, we will briefly review the anatomy and physiology of the foot. The body weight is borne by the astragalus, which articulates above with the tibia and below with os calcis. The chief movements are plantar and dorsiflexion, eversion and inversion and these must be free to have proper function. The foot is composed of an inner longitudinal arch, formed by the os calcis, astragalus, scaphoid, cuneiforms and three inner metatarsals. The purpose of this arch is to give spring and elasticity to the gait, and act as a shock absorber. At the front end of the foot is the transverse arch, formed by the metatarsal heads. The outer border of the foot is formed by the os calcis, cuboid and fifth metatarsal. This is almost in contact with the ground, and represents the strong side of the foot where most of the body weight should be borne.

The foot has two functions: first, to act as a passive support or pedestal, and, second, as an organ of locomotion.

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When standing, the astragalus is rotated inward and downward, and takes along with it the bones with which it articulates, so that, in standing, the leg is rotated inward in its relation to the foot; the bones interlock, until checked by the ligaments, and very little muscular effort is necessary. This is known as the passive attitude or position of weakness.

The second function of the foot is to act as a lever to raise and propel the body; the calf muscles furnishing the power and the metatarsal heads acting as the fulcrum. For this combination to be used normally and efficiently, it must be held in such relation to the leg that the line of weight passing downward through the center of the knee and ankle joint, is continued approximately over the second toe or center of the foot.

For this reason it is so important when walking that the feet be held parallel and not turned outward, as in standing, as the latter position would throw the line of weight to the inside of the foot, or over the arch, putting a strain on the ligaments, and there would be no lever and fulcrum action. This mode of walking, combined with weakened muscular support, results in laxness and strain of ligaments holding the arch together, with breaking down of the arch, abduction of the foot, pain and disability.

Therefore, any treatment not based on this mechanical fact, is sure to fail.

The feet should be held parallel. As the leg is extended, the foot should be at a right angle, the back of the heel touching the ground first, then the weight falling onto the heel, the outside of the foot and finally the ball of the foot or anterior arch, the final impulse of propulsion being given by the metatarsal head of the great toe.

Chief among all causes of foot pain is probably improper shoes. These, by crowding the toes, due to being too narrow, too short, too long or of improper contour, can by direct pressure cause corns and bunions and indirectly, due to pain or lack of space, prevent the proper use of the foot as a fulcrum.

Other important causes may be a recent illness, a toxic state, overweight or overwork, which by weakening the muscular support, contribute toward weak feet.

Also conditions such as arthritis, or osteomyelitis, tuberculosis, syphilis or pyogenic infection; or muscular weakness and paralysis following poliomyelitis and cerebro-spinal conditions; or injuries, such as sprains or fractures.

The early symptoms of foot trouble are a sensation of weakness, 'tired feet,' usually followed by a feeling of discomfort or slight pain about the inner side of the foot and ankle. A dull ache in the calf, especially when there is a short heel cord, burning sensation, numbness, and free perspiration.

As the condition progresses the foot becomes very tender, markedly swollen and patient is barely able to walk, and then, not without the greatest pain and effort.

The prevention should begin with the child who should be watched carefully from birth for signs of foot deformity or weakness, and more particularly when he begins to walk. Any general condition such as rickets, or any deformity of other parts, such as knock-knees or bowlegs, that can have some bearing should be corrected. The child should be taught to walk properly, and shoes should be worn with a straight inner last, and sufficiently wide that the toes will have room for expansion on weight bearing. If foot is weak, as evidenced by a pronation of the foot, and marked prominence over inner aspect of ankle, it can easily be corrected at this stage by a corset, or other substantial shoe, raised on the inside edge from ⅛ to ¼ inch. In addition to this, proper method of walking is taught and physio-therapy given. It is particularly important that children's feet be carefully watched, as they seldom complain of pain, and as Whitman so aptly puts it: "Foot troubles are more often ingrown than outgrown."

From the standpoint of prevention, what applies to the child, will largely apply to the adult. If the proper fitting shoes are worn, the feet used correctly, and attention given to the first symptoms of strain, there will seldom develop trouble of a serious nature.

Treatment should be begun by taking a careful history, which should include family and past history, any recent illness or injury, onset, duration and exact location of complaint; occupation, the amount of work feet must do, and what type of treatment has been attempted. Most of these patients come with some type of patent arch plate that has proved unsatisfactory, or at best, given only partial relief. An inspection of the general physical condition is then made to see if there is any disproportion of weight, diseased or toxic state, foci of infection, as teeth, tonsils, pelvic condition, etc. and the patient directed toward the proper channels for elimination of these contributory causes.

The feet are then examined to determine the amount of passive motion, general contour, location of callouses or any deformity. The patient is then made to stand holding both feet parallel, and about 2 to 3 inches apart to determine the amount of internal rotation of the astragalus, condition of the arch, the amount of pronation of the foot and whether the line of weight bearing falls in the proper place. An examination of shoe will yield direct information, by noting shape and area of greatest wear.

Here allow me to correct a popular erroneous impression. A foot does not necessarily have to be flat to be showing signs of strain, nor does a flat foot necessarily give trouble. We see many feet with intact or even high arches, that are painful and beginning to weaken. On the other hand, there are many flat feet, particularly where the condition is racial, as in the negro, where even in the face of excessive use, have never given trouble. Of course, the springlike qualities are absent and the difference here is somewhat the same as that between a hard rubber and a pneumatic tire. Both, however, can be efficient for weight bearing.

The first indication for the treatment of the local condition, is rest of the tired and strained ligaments and muscles. This is done by strapping with adhesive plaster, holding foot in position of inversion, which invariably gives prompt relief in feet that are not too far advanced. Occasionally, it is necessary to fit a felt pad under the longitudinal arch and hold it in place by strapping after the method of Jones. Strapping is applied 2 or 3 times, at weekly intervals until foot has sufficiently recovered for further treatment. The severity of the case will then determine what future course to pursue. In the average case, in the male, who can very easily be persuaded to wear proper shoes, a Thomas heel with ¼ inch raise on inside edge; instructions as to proper walking with contrast baths to stimulate the circulation and increase muscle tone, will usually suffice.

It is more difficult to persuade the female to wear a sensible shoe, but they will usually consent to wear a good fitting oxford at least for everyday wear. This does not necessarily imply a low heel as many patients are distinctly more comfortable in a 2 or 3 inch heel. The shoe is corrected in the same way and the same general plan of treatment instituted. In more elderly patients with weak support a high lace shoe is often indicated.

In the more severe cases, where there has been considerable structural change, with complete relaxation of arch, marked bulging on inside of foot and pronation, it is necessary to provide a temporary support. This is done by making to order a thin, steel tempered plate of 22 gauge from a plaster model of the patient's foot, taken in the corrected position. This acts as a spring like support, favors proper walking and approximates more closely, the natural arch, than anything mechanical that we have. It is attached to a leather inner sole and may have, when necessary a flange on inside to hold up and out the astragalo-scaphoid joint. The height of the plate can be raised

or lowered to meet requirements. This differs from the store plates in that they are not rigid and do not limit the natural movements of the bones of the foot. Besides they are made to fit one particular foot and no other; therefore, will always retain their proper position inside the shoe.

Usually these patients also have some pain over the forefoot, and examination will reveal a marked spreading of the matatarsal heads, as a rule, with callous formation on the plantar surface. Many of these patients have visited the chiropodist for months to have the callous removed, thinking that they were thus removing the source of their pain. When a pad is placed behind the metatarsal heads and held in position, the patient is marvellously relieved and the callous soon disappears. When it has been necessary to make a plate this raise can be incorporated in it.

After about a year, with the plates, together with regime outlined, the relaxed ligaments appear to tighten, muscles regain their power and plates can be discarded.

In the very rigid and spastic foot, manipulation and overcorrection in a plaster caster in position of marked inversion is indicated. Occasionally it is necessary to secton the peroneal tendons for marked spasm, or lengthen the tendo achillis when shortened. The patient walks in these casts for several weeks until the spasticity and rigidity are overcome, when foot can be treated along the same principles as outlined above.

For the very relaxed flat foot, which will not yield to these measures, it is occasionally necessary to operate and by arthrodesis and shortening of the ligaments, rebuild the arch and alter the relations of the foot. Very recently Michael Hoke of Atlanta has described a new operation for this type of foot, that appears to be very satisfactory.

Another very common cause of foot pain is hallux valgus or bunion, usually caused by tight fitting shoes. The great toe is abducted, there is an actual exostosis of matatarsal bone, and inflammation of the overlying bursa. Operative treatment is required in all advanced cases, and when properly performed the results are satisfactory and permanent.

One more cause of foot pain that should be mentioned, recently brought out by Friberg, are tumors involving the plantar aspect. He has noted that these are sometimes difficult to diagnose and some of them are discovered only after various measures have been tried without success. Excision is nearly always necessary.

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DISCUSSION.

Dr. Edward S. Hatch (New Orleans): I hesitate to get up and talk about feet, because I have been harping on this subject for the last twenty-five years, but I want to congratulate Dr. Hyman on his excellent paper.

Inasmuch as all of us who are doing orthopedic work are talking feet, you would think the general public, at least the store people, would hesitate about advising just what to do in every case of sore feet they see, but that is not a fact. More advertising is being done all the time and more people are telling each other what should be done about feet than ever before.

I am sure that if the doctors who see this class of case would think more sensibly and rationally about treating feet and not just jump at a diagnosis and send the patient for this or that piece of apparatus, we would all be better off.

We see many children who have been advised to wear rigid foot support. That is one of the worst things that can be done. Children's feet are very flexible and to put a plate on a child's foot is certainly not to be considered. These patients are often seen by orthopedic surgeons with

the history that they are not walking as well as before plates were applied. On the other hand, the treatment of adults suffering from painful feet is quite a different proposition. In mild cases, exercises, contrast baths and flexible shoes, such as the Cantilever, often give relief.

Dr. Lovett was right when he said that in bad cases of flexible flat feet we must relieve the tired muscles first; that is, the foot must be supported for a certain time in order to rest these overtaxed muscles so that if we give exercises and flexible shoes to this type of feet, we will defeat our ends. Such cases should be supported with a flexible plate; each plate made carefully from a cast of the patient's foot.

Dr. Hyman mentioned tumors of the plantar fascia, which as Dr. Freiberg said in Memphis about a month ago, are often found to be sarcomas, and in spite of treatment go on to inevitable end of tumors of this type.

ESOPHAGEAL AND GASTRIC VARICES.*

A. E. GORDIN, M. D.,

JACKSON, MISS.

Varicose veins of the esophagus and stomach are more frequent than was formerly believed but they are not commonly observed and it is necessary to examine the literature for almost a century in order to obtain enough cases to make a summary. Very few cases are reported in American literature; however, French and German surgeons and pathologists report the conditions more often. The first case reported was one of esophageal varix by Diberder in 1837. Sometime later, 1838, Faunel published his case. A few cases were reported in the foreign journals up to 1880 and all attributed to alcoholic cirrhosis. In 1880 Leduc reported a case of hepatic cirrhosis of syphilitic origin which had led to a thrombosis of the portal vein and the veins of the esophagus and stomach. The first case of esophageal or gastric varix that I can find reported in America is a case of an erosion of the mucous membrane into a varicose vein near the cardia, reported by Van Bibber before the Baltimore Academy of Medicine in 1886. This case was diagnosed at autopsy and the specimen was presented before the society by Councilman and published in the Maryland Medical Journal in 1887. In 1897 an editorial was written in the Medical Record on the importance of suspecting this condition and how invariably it was diagnosed gastric or duodenal ulcer. Although frequently discussed there seems to have been very little of importance written on the subject until Constant of Paris made a contribution to the study of this condition in 1924. He reported eight cases from 1900 until 1924. Even though nothing was written by Torek in the German Hospital, in New York I personally remember three cases coming under his observation while I was house surgeon in his service, from 1915 to 1917, and it was for this reason that I suspected the diagnosis of the case which I will later report. A case was reported by Karl Herman in 1927. The diagnosis was made by bronchoscopic examination; and in cases of esophageal varices the bronchoscope has been the most reliable diagnostic method. A case was reported in 1914, by Cobb of Marshalltown, Iowa. Text books refer briefly to the subject but give very little information of value. Several other papers have been written but were not available to me at this time.

Diagnosis is usually made at autopsy; however, in later years diagnosis has been suspected after hematemesis and made by bronchoscopic examination. Diagnosis has also been positively made in gastric varices at time of an exploratory laparotomy where ulcer has been suspected. It is interesting to note that in a number of cases reported at autopsy of esophageal varix, a gastroenterostomy had been previously performed without benefit.

Cases of esophageal and gastric varix have been reported in both the male and female at ages of between twenty and seventy years, but the larger number of cases were in persons between 35 and 40 years of age.

*Read before the Section on Surgery at the Sixty-fourth Annual Session of the Mississippi State Medical Association, Jackson, May 14, 1931.

Varicose veins of the esophagus are usually in the lower one-third and sometimes involve the cardia of the stomach. Gastric varices may involve any or all branches of the portal vein. Therefore, the varices may be either on the lesser or greater curvature of the stomach, the pylorus, the omental veins, the pancreas and spleen, or the veins of the small and large intestines. Although this paper is confined to gastric and esophageal varices, considerable has been written on varicose veins of the small and large intestines.

The varicose veins of the stomach or esophagus are not always the same but are more or less large and tortuous. In the esophagus they extend longitudinally and near the mucosa. In either the esophagus or stomach they may reach the size of a pencil. Their walls are thin but their surface smooth and regular except for swellings which exist in places. Erosions or ulcerations may be seen in them at autopsy. The cause of this condition is not known. Older writers attributed it to malaria because of the almost invariable enlargement of the spleen; syphilis has also been mentioned, cirrhosis is usually present and cardiac and renal lesions are frequent. The portal veins may be obliterated or partially obliterated by a thrombus. Some attribute the condition to a congenial weakness of the veins. They have also been seen along with neoplasms of abdominal organs. There seems to be nothing in the literature suggesting a definite cause for this condition.

The symptomatology is very restricted. The chief symptom is hemorrhage and is constant and, of course, is seen only after a varix ruptures. As a diagnosis cannot be made or even suspected until there is a rupture, it would be difficult to say whether hemorrhage occurs early or late. The vomiting of blood may occur suddenly and is the first symptom. In some cases the blood fills the stomach, and before vomiting the patient may have a feeling of weakness, shock, or fullness in the region of the stomach, and hiccoughs; occasionally, though rarely accompanied by gastric colic. In some cases there is no vomiting, simply the feeling of weakness, fullness in the stomach, followed by black tarry stools. Rupture of a varix usually follows severe muscular exercise but may come on when the patient is asleep. Vomiting is usually expulsive and spontaneous and no nausea accompanies it. A single hemorrhage may cause death but more usually is repeated and gradually exsanguinates the patient in spite of all forms of treatment. The blood may be bright red or black depending on the length of time it remains in the stomach before being vomited. The secondary symptoms are those which accompany severe hemorrhages of any kind, such as chills, fever, shock, coldness and rapid pulse. Blood examination shows marked anemia. In nearly all cases there are no other clinical signs and until hemorrhage occurs the diagnosis cannot even be suspected. This hematemesis, of course, is more a symptom of the complication than of the actual condition. It is singular that there is no pain accompanying the condition.

As hemorrhage is the only symptom, I will mention other conditions which might be confused in the diagnosis, such as ulcer of the stomach or duodenum, carcinoma of the stomach, leukemia, cirrhosis, occasionally malaria, hemophilias, vicarious menstruation and rupture into the stomach of an aortic aneurism. From the cases reported I would recommend in all cases of hematemesis without gastric pains where other definite causes cannot be found that esophageal gastric varix be suspected.

In reporting my case which was referred to me by Dr. J. C. Walker, on March 4, 1929, I wish to acknowledge the cooperation and help given me by other members of the Jackson Infirmary Staff.

CASE REPORT.

The patient, Mr. C. A. H., a traveling salesman, white, aged 35 years and married, called Dr. Walker about 3 a. m. complaining of severe gastric

hemorrhage. He was suddenly awakened vomiting a large amount of bright red blood. He stated that he had just returned from Birmingham the day before where he had been under treatment for duodenal ulcer. There was no gastric pain nor had there ever been. He had had several less severe spells of haematemesis and was "going down," loss of appetite, etc. Upon admission to the hospital the patient gave me the following history: About two years ago he had begun to feel badly and was getting very weak, pale and nervous. He consulted the Mayo Clinic but no diagnosis was made (this was confirmed by a letter to me from the Clinic). He continued to work until about three months ago when he had a mild spell of hematemesis and consulted one of our own staff members. He was found to have a rather sever diabetes and was thought to have had a bleeding duodenal ulcer. This latter was partly confirmed by indirect roentgen ray findings when examined by Dr. Adkins. The patient seemed to improve on an ulcer diet with rest and treatment for the diabetes. He later had two to three moderately severe hemorrhages from the stomach so consulted Dr. Seale Harris who made a diagnosis of duodenal ulcer and kept him in his hospital for several weeks on an ulcer diet. He improved a great deal but on the very day he was discharged he had this severe gastric hemorrhage which I have mentioned.

Physical findings were negative except for a very pale, anemic almost exsanguinated white man, having chills and sweats and vomiting dark blood. No masses or other abdominal findings were found in the abdomen. Patient's blood showed signs of severe anemia with all of its characteristic findings. The urine showed sugar, the blood sugar was about 280, the coagulation time was three minutes. There was no albumin or casts in the urine. Temperature on admission was 102° and its maximum was 103° and minimum 98°. The pulse was variable between 100 and 160. Blood pressure was variable, 100 to 105 systolic and 70 to 40 diastolic. The patient was kept in bed on a strict diet being given duodenal feeding but complained constantly of a fullness in the epigastrum. His stools were almost pure blood and he had one more attack of haematemesis. He continued to get weaker and did not improve. Blood transfusions were given, intravenous drips, cyanathen, calcium and thromboplastin and serums without effect.

I had made a tentative diagnosis of varicose veins of the esophagus because of the repeated hematemesis, the constant bloody stools, anemia, in the absence of other definite symptoms. In spite of this his family insisted on an exploratory laparotomy because a diagnosis of bleeding ulcer had been made by several competent diagnosticians and roentgenologists and because the patient continued to get worse on medical treatment.

On March 15, an exploratory operation was performed under local anesthesia. The abdominal cavity contained some free sero-sanguinous fluid. The stomach, intestines and other abdominal organs were very anemic. On careful examination of the stomach and duodenum no ulcer was found nor were any adhesions, induration or other signs of ulcer found. The striking findings were very pronounced. First, the liver was apparently normal in size, shape, feel and appearance and most pronounced of all was the appearance of the gastric and omental veins. The veins of the greater and lesser curvature of the stomach were large, about the size of a large lead pencil, they were smooth with the exception of a few dilated areas. The veins were so thin that I felt that should I touch one it would rupture. The blood was anemic, making the veins and their contents almost transparent. The veins of the stomach wall were the same though slightly smaller. The omental veins were very large, some about one-third of an inch in diameter. The mesenteric veins to the small and large intestines were also varicosed but to a lesser degree. A thorough exploration of other organs was not made because of the local anesthetic, the condition of the patient and the very thin condition of the veins. The abdomen was closed without drainage. Patient made an uneventful recovery from the operation which, of course, did him no good. He remained in the infirmary for three weeks longer finally being able to be moved to Winterset, Iowa, his home where he died four weeks later from a severe gastric hemorrhage.

DISCUSSION.

Dr. A. Street (Vicksburg): The usual thing that comes to the mind when we hear of esophageal and gastric varices or varicosities of the veins of any other portion of the portal system, is portal obstruction. We know that the usual cause of portal obstruction aside from tumors pressing on the vein is cirrhosis of the liver and the usual type is portal cirrhosis. With portal cirrhosis there is splenic enlargement, developing after the cirrhosis has occurred. Occasionally the splenic enlargement precedes the cirrhosis of the liver and then we call it Banti's disease. In Banti's disease there is more of a hemorrhagic tendency than there is in cirrhosis of the liver, and in Banti's disease large gastric hemorrhages. Large hematemesis from the esophagus may be the first symptom which calls the attention of the patient with Banti's to the fact that he is sick. In the Banti type of disease, of course, we can remove the spleen. If we can do it early we have done the patient a great deal of good because splenec-

tomy has been demonstrated to arrest the progress in some cases.

It has been my experience that it is hard to get a patient with an early case of Banti's disease to consent to operation.

Walters has had some very good results in some of these cases by ligating the coronary veins but it is too early to be sure it is a procedure worth while. Of course, in the more advanced cases of cirrhosis of the liver, and they are usually advanced when you come in contact with them, you would hesitate to do any major surgery.

Dr. A. G. Payne (Greenville): We have noticed for a good many years that there have been less operations on the stomach, suggesting that there is a gradual decline in operating, favoring diet and treatment. Last year, in Dr. Lahey's address, that is, his Chairman's Address before the Surgical Section of the American Medical Association, he gave a resume of cases they had treated in their clinic in the recent past. It was remarkable the number of cases they were treating medically.

I want to say that there is nothing more alarming to a patient or to a physician than a hemorrhage from the stomach. I have had them myself and I know how alarming they are. I don't know but what there is something hereditary about duodenal ulcer because in the last year my son, who is thirty-three years old, had a massive hemorrhage from the stomach and came very near succumbing to that hemorrhage.

That brings up the question of the causative factors in these hemorrhages. Of course, we first think of gastric and duodenal ulcer. Then we think of cirrhosis of the liver, and then we have splenic anemia. Therefore, we ought to take more time and go carefully into the differential diagnosis of these conditions and rightfully should. There are so many cases that would be better left unoperated upon especially for a time.

Dr. A. E. Gordin (closing): Gentlemen, I appreciate the discussions by Dr. Payne and Dr. Street, and I know they feel like I do, that it is a negative discussion and more what we do not know about it than what we do know. I am impressed with how little has been said about this subject, especially in our American journals.

Especially interesting to me is the fact in hematemesis we should not jump at a diagnosis of duodenal ulcer. In nearly every case I have seen reported in the literature, a diagnosis of duodenal ulcer has been made, and in a great many cases a gastro-enterostomy has been done. I do not believe in gastro-enterostomy unless we have a definite reason for doing it.

Another thing striking to me in the consideration of this matter is that the liver has not been cirrhotic in a great many cases that were reported and there was no portal obstruction. Therefore, it gets back to the cause of the varicose veins and superficial varicosity and we don't know what causes it.

CONGENITAL OBSTRUCTION (ATRESIA) OF BILIARY PASSAGE WITH REPORT OF CASE.*

H. CARROLL McLEOD, M. D.

HATTIESBURG, MISS.

Congenital obstruction of the bile passages has been a subject not touched upon so frequently in the literature. Probably this has been due for the most part to the short life of these infants, or to the fact that it is not recognized before death, and as most of us are situated we are unable to obtain autopsies.

In 1911, Howard M. Wolbach collected 76 cases of congenital obstruction of the bile ducts, including a case of their own.

In 1916, J. B. Holmes reported a case of his own, and collected 108 cases of congenital obstruction of the bile ducts, and by means of 80 drawings illustrated the conditions as he found them, and at what point, or points, there was an anatomical cause for interference with function.

J. Keith Gordon of Boston said in a series of 1086 consecutive autopsies at the Childrens and Infants Hospital, Boston, there occurred but four cases of congenital obstruction of the bile ducts.

W. E. Ladd, reported 20 cases. Eleven of these were operated upon. Eight of the eleven were amenable to surgical drainage of the bile, and of these six recovered. In Holmes' series of cases, about 16 per cent had atresia of the common duct, but neither the hepatic or the cystic ducts were patent. These are amenable to surgical treatment. It would be shown then that with a diagnosis of obstruction of the bile ducts, with an otherwise hopeless outlook, that surgical interference is advisable, with the hope that the anomaly of the bile passages might be of such nature that a communi-

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cation with the intestines might be effected.

In reviewing the literature it is shown that a cirrhosis of the liver always accompanies an obstruction of the biliary passages, and this was the condition present in my case.

After exhausting every effort to keep our little patient alive, and faced with death not long hence, my associate, Dr. L. B. Hudson and I, with the suggestion of Dr. Charles J. Bloom of New Orleans, resorted to surgery. In this we hoped that our obstruction was of the common duct, that the hepatic and cystic were patent, and that by draining the gall bladder we could at least turn the bile from the blood stream, which had now caused a compete break in the kidney, from which almost pure blood was passing. We thought that by stopping the bile, that the anemia, which was very pronounced, would clear, and that possibly the little life could be spared, until by a future operation the communication with the intestines could be effected. But upon opening the abdomen, or our secret box, of which the scalpel is the only key, we soon found that such was not the case, and surgery was of no avail.

CASE REPORT.

Twins delivered by me August 17, 1930. Boy baby, weight seven and one-quarter pounds, born first, at 8:20 P. M., and normal in every respect. Girl baby last, weight five and one-half pounds, born at 11:40 P. M., blue at birth, and it took from 10 to 15 minutes to get her to breathing, by immersion with change from hot to cold water, and vice versa. That night, after midnight, she turned blue again, and was then put into incubator, and kept there until Saturday, August 23, the day before she went home from the hospital. On the third day in the incubator she began turning yellow, as did the boy. Both were given galactose, the boy clearing, but the girl becoming worse, and this continuing for three days, she was given another round of galactose. During these few days she refused nourishment, and was given hypodermoclysis of five per cent glucose in one per cent saline for four injections, every eight hours, when she again began to eat. This first week she began vomiting, but stopped vomiting before leaving the hospital, August 24, 1930.

The first week at home she again refused some of her milk, and her weight dropped to five pounds, and at this time the kidneys were making yellow stains on the diapers. The first week in September, Dr. Hudson, my associate, went out with me to see her, and agreed that the condition would clear. The liver was not palpable, no tumor mass was present, abdomen was soft, and patient was now gaining weight, but still very yellow with hard, ball-like, grayish-white stools, as before. We gave grey powders three times daily, which stopped the vomiting, relieved the constipation, but did not color the stools except very faintly.

When she was five weeks old she appeared normal in every way except color, eating more than her twin brother, and only vomiting once or twice a week.

During all this time she did not seem to have any pain, being an exceptionally good baby, sleeping soundly, and being hard to awaken for feedings. All through November she did fine apparently, but still vomiting occasionally, color remaining the same, and still hard, greyish-white stools.

About December the first the parents noticed she was turning a greenish yellow color, and stopped gaining weight, which was now nine pounds, and soon thereafter the vomiting became worse. About the middle of December Dr. Hudson saw her again with me, and we decided to make a roentgenogram, and have some blood pictures made. This was done December 18, the roentgenogram being negative, the blood picture and urinalysis as follows, with a negative Wassermann:

Erythrocytes, 1,960,000; Hb. 50 per cent. Color index, 1.3. Anisocytosis, poikilocytosis, polychromatophilia, and two normoblasts. Total leukocytes, 8,000. S-47, L-6 per cent, N-47 per cent; clotting time, four minutes. Urinalysis: albumen 1.5 per cent, insufficient for specific gravity, bile, occasional pus cells and epithelial cells. Red blood cells. No casts.

On account of the blood picture, I gave her two intra-muscular injections of whole blood, 20 c. c. at an injection, and sent her to Dr. Charles J. Bloom in New Orleans on December 22, with a diagnosis of biliary obstruction.

Dr. Bloom examined her, and on the strength of the blood picture gave us a diagnosis of pernicious anemia, and gave us the following treatment: Daily intra-muscular injections of 20 c. c. of whole blood; one-half c. c. of solarsen by intramuscular injection, and Lilly No. 55 liver extract and iron.

On December 24, the blood picture had fallen to 1,210,000 reds, 30 per cent Hb., 1.2 color index, but the white cells had increased to 8,550, showing slight gain in resistance. Continued same treatment, and blood pictures were as follows:

December 27, 1930, erythrocytes 1,170,000.

January 2, 1931, erythrocytes 2,120,000 leukocytes 30,500

January 5 1931, erythrocyte.s 1,990,000.

January 8, 1931, erythrocytes, 2,570,000.

January 14, 1931, erythrocytes, 2,170,000, leukocytes 24,700, N-46 per cent, S-49, L-2 per cent, myelocytes 3, and 4 reticulated red cells.

January 18, 1931, erythrocytes 1,600,000, leukocytes 34,600, S-50, N-46 per cent, myelocytes 3, and 4 reticulated red cells.

From the first of January on to the fifteenth of January you could see that she was gradually losing ground, and her vomiting being very annoying. Her liver was very large, and spleen palpable.

I told the parents that the only thing I could see to do was to open the abdomen, and if the blockage was in the common duct, that by draining the bladder it might prolong life until a second operation could be performed, but I would not consider this unless Dr. Bloom agreed to same. So I again sent them to Dr. Bloom, they returning that night, January 21, with Dr. Bloom's diagnosis of biliary obstruction, with his suggestion that she be operated upon that night as she was failing fast, and delay was more dangerous.

Under 1 per cent novocain anesthesia the abdomen was opened, draining a straw-colored fluid; the liver was very large, extending almost to umbilicus. It was of a dark brownish-red tinge, very hard, with sharp borders. On looking for the gall bladder we found simply a greyish white cord, the size of a lead pencil, about one inch long. I tried to use an aspirating needle in this, but with no response. We tried to identify the ducts, but these were obliterated. Knowing that surgery was of no avail, we closed the wound, and the following morning the little one died.

CONCLUSIONS.

1. Persistent jaundice, either at birth, or coming on later with no trace of bile in stools, think of biliary obstruction, or atresia.

2. Rule out syphilis, although in reviewing the literature only four cases were reported syphilitic.

3. Progressing anemia from bile entering the blood, and breaking down the kidneys.

4. Marked cirrhosis of the liver which accompanies all biliary obstruction, but not all cirrhosis has obstruction.

5. Bile in urine staining diapers.

6. Increase in size of spleen.

7. Surgical intervention in protracted cases of jaundice in infancy, diagnosed congenital obstruction, or artesia of the bile ducts, because the location of the obstruction may be amenable to surgery.

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DISCUSSION.

Dr. J. K. Oates (Laurel): The paper of Doctor McLeod presents a very rare condition and there is little literature on this condition.

First is the necessity for early recognition and the institution of surgical measures at once.

Next is how this may be recognized. Of course, Dr. McLeod, I am simply reiterating this to impress the fact, if I can, that if a case of jaundice comes on about the second week after birth and lasts over two weeks with enlargement of the liver and spleen and a secondary anemia, it should always be considered as an indication of an obstruction. There is a test that might help you out, known as the Van den Bergh test. I can't tell you how it is performed. It is a test that shows whether this bile in the blood is due to direct production in the blood or to an obstruction and reabsorption of the bile after it has been secreted in the liver. That is one of the main points in the diagnosis. Reading the literature on this subject a very interesting case came to my attention. That was a case of Dr. Irving, a case where the jaundice came on, I think, about the third year of life and lasted until the child was nineteen years old, and he operated on this child after it was nineteen years old, and after he had operated the jaundice cleared up and the child became all right after that, but during all that time—from the time it was three years old up until it was nineteen years old—it was jaundiced continuously.

Dr. R. L. Sanders (Memphis, Tenn.): Dr. McLeod's paper brings to mind a case I attended five or six years ago in the Baptist Hospital at Memphis. I shall make a little sketch of it on the board.

The patient was an infant about one week old, who had rejected all food taken since birth. A little barium was given to the child and a roentgenogram was made. It was seen that nothing passed through the pylorus and the condition was believed an unusual type of pyloric stenosis. The

abdomen was opened and the stomach was found to end blindly at the pyloric region. There was no duodenum. A gastro-enterostomy was done, but the patient was in such poor condition that it died that night.

Necropsy showed the common bile duct to be continuous with the end of the jejunum. The duct was completely strictured at the juncture point, and there was some dilatation of its proximal portion. Moderate jaundice was present. If this anomalous condition had not existed and the structures had permitted, an anastomosis between the dilated common duct and the jejunum might have been effective.

This was the only case of its kind I have ever seen and I thought it might be interesting to Dr. McLeod in connection with the case he has just reported. Our case was reported by a pediatrician associated with us in attending the child.

Dr. McLeod (closing): I have nothing else to say. I thank the gentlemen for the discussion.

THE RIGHT SIDE OF THE ABDOMEN FROM A SURGICAL STANDPOINT.*

JOSEPH F. ARMSTRONG, M. D.

JACKSON, MISS.

Every surgeon recognizes the difficulty of abdominal diagnosis, but we are all agreed that there are many more difficulties on the right side than on the left. When you think of the possibilities of error in the diagnosis of left sided abdominal diseases you see how few there are. It is true one may miss an early stomach cancer, one may mistake a spleen or kidney for a colonic tumor or one may not realize how often a sub-acute appendix will give pain in the left iliac fossa or even in the left hypochondrium. Diverticulitis may be difficult to diagnose and a stone in the left ureter may require some study, but these are trifles compared with the complicated conditions existing in the right side of the abdomen. This is probably due to the protean activities of the appendix, and from the purely vicious if unconscious association of right sided abdominal pain with disease of that organ. Thirty years ago it was rarely suggested that in its quiescent stage between attacks the appendix could give rise to symptoms, whereas today we are growing more and more to realize that the appendix may give symptoms suggestive of disease of the organs of the upper abdomen as well as some of those of the pelvis. But in addition to the appendix, the right side of the abdomen has many more traps for the unwary and for the most skillful.

DUODENAL ULCER OR GALLSTONES?

Diseases of the gallbladder are traditionally difficult to diagnose, and its association with the duodenum, anatomically, perhaps, rather than pathologically makes confusion easy between disorders of these neighboring structures. Can we be sure of differentiating between diseases of these organs by the history, by the symptoms, by our abdominal examination or by the exactitude of the ancillary methods of survey? One is probably more apt to diagnose a cholecystitis as a duodenal ulcer than a duodenal ulcer as a cholecystitis. What are the points one relies on? Both these conditions tend to have periods of comparative freedom from symptoms. I am sure that the severe attacks of gallstone colic are more severe and less amenable to treatment than the severe attacks of duodenal ulcer. I know that sometimes the duodenal ulcer patient will give a very lurid account of his suffering, and I have seen patients in a bad attack, obviously in great pain, but it does not compare with the true gallstone colic with which will come vomiting, sweating and collapse, and for which there is no remedy but opium. But it is in the quiescent period, or perhaps one should say in the semi-quiescent period, that the real difficulty arises. In making a preliminary diagnosis before deciding what ancillary investigations should be made, one would do well to consider the following three points: 1. History of the attacks; 2, symptoms during the intervals (the duodenal case is generally well unless the appendix is also affected, while the gallbladder case often has flatulent dys-

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pepsia and right shoulder aching); 3, the examination of the abdomen (comparative rigidity of the upper rectus muscle in the duodenal case as compared with the same condition of the upper oblique muscles and Murphy's sign in gallbladder). Murphy's test consists of an examination of the gallbladder with the patient sitting up. The surgeon sits behind the patient, and placing his hands on the right and left hypochondria directs the patient to relax and take a series of deep breaths. With each expiration the hands are pressed into the hypochondria, the palms of the hands being brought more and more horizontal, after three or four breaths the gallbladder will be brought down during respiration onto the fingers of the right hand, and if it is tender there will be a characteristic catch in the breathing. This test differentiates admirably between gallbladder and kidney affections. One must not put too much reliance on physical configuration, although one is naturally inclined to consider the fair, fat and forty matron a more likely host to gallstones than the thin, fine-drawn male, nor must one expect too much help from the patient's likes and dislikes for food.

SPECIAL METHODS OF INVESTIGATION.

What of the ancillary methods? Examination by the roentgen ray has taken the foremost place in both cases. However, I think it will be agreed that radiographic examination after a barium meal does not give as high an average of success in duodenal as in gastric ulcer. This is due to the fact that a great majority of duodenal ulcers are superficial; that is, there is no crater in which the barium can lodge, while in the lesser curve ulcers, at any rate as the surgeon sees them, a crater is the rule. Craters are rare in duodenal ulcers unless the ulcer is on the posterior or inner surface, and these form quite a small proportion, and then the shape of the duodenal cap may be distorted by spasm due to many things, among them cholecystitis. The examination of the gallbladder by roentgen ray after the administration of the dye is being used generally at the present time and with a certain amount of success. However, it would be dangerous to rely on this alone for your diagnosis. The Graham-Cole test consists of the administration of the dye by mouth or intravenously with the pictures taken at varying intervals. A healthy gallbladder casts a shadow which gradually becomes more concentrated and finally disappears. The other method is the chemical examination of the stomach contents in case of duodenal ulcer, and the microscopic and chemical examination of the duodenal contents in gallbladder disease. I am afraid we are rather disappointed with the test meal as a method of clinching the diagnosis. When this method came into general use great things were hoped for it, and the curves certainly looked very instructive, but further experience shows such wide variations in the consecutive examinations that one has begun to lose faith in it. Perhaps the most helpful examination is that of the resting juice which may show varieties, both chemical and microscopic, which may be very useful. The examination of the duodenal contents by Vincent Lyon's method has never come into general use as a diagnostic procedure; however, it may be useful in the hands of some diagnosticians.

RENAL LESIONS.

As to the renal lesions: It probably has been the experience of everyone here to confuse a case of urinary stone with a case of appendicitis, and I dare say many appendics have been removed with no relief until the passage of a stone from the kidney has taken place. This brings me to the subject of the differentiation between appendicitis and some renal lesions. The differential diagnosis of appendicitis and ureteral stone may be very difficult if for any reason the stone cannot be localized by the roentgen ray. One has then to rely upon the possible appearance of urinary

symptoms, the presence of abnormalities in the urine, and a cystoscopic examination. The only safeguard is that which results from our hospital system where every patient passes through many hands before the diagnosis is definitely settled. Acute infections are more easily diagnosed than the chronic recurring attacks. One should not mistake a perinephritic abscess of a hematogenous origin for a retrocecal appendix abscess. The former is never so acute, and rarely leads to an abdominal mass. But to distinguish between a retrocecal appendicitis and an acute ascending pyelitis of pregnancy may be very difficult, especially if the kidney is not functioning, so that the pus does not appear in the urine. The really valuable signs of pyelitis are: 1. Acute tenderness in the costo-vertebral angle; 2, an initial rigor and a temperature perhaps as high as 104°, but certainly higher than that which is usual in acute appendicitis. Deitel's crisis (or intermittent hydronephrosis due to a kinking of the upper ureter) may lead to error, but there is rarely any need for hurry in these cases and a pyelogram will settle the diagnosis without difficulty.

APPENDICITIS.

There is an old warning of the danger of mistaking a perforated duodenal ulcer for an acute appendicitis on the grounds that the duodenal contents tend to gravitate to the right iliac fossa and give rise to signs in the area of the appendix. This should never give trouble, even in the absence of a previous history of duodenal indigestion. The onset, the general character of the abdominal rigidity (which is most marked) and especially the condition of the patient, all tend to make the differentiation easy, and I do not feel that the mistake should be made, nor is it, I believe made very often. We all realize that one seldom sees what might be called a typical textbook case of acute appendicitis. It is seldom that we see all the symptoms in any one case; however, be that as it may, we are learning to make our diagnosis of appendicitis in spite of the absence of some of the so-called typical symptoms. One patient may have nausea, another may not; one may have severe pain in another the pain may be comparatively light, in one case the leukocyte count may be low or even subnormal; in another it may be much higher. But what we look for is the association of one or more of the positive symptoms with tenderness or muscular rigidity and the general appearance of the patient. Here, I would like to draw a distinction between pain and tenderness. Conditions giving rise to tenderness are much more easily diagnosed than those giving rise to pain only, for pain is purely subjective and varies in significance according to the sufferer's general makeup. Tenderness cannot be hidden, pain might be suppressed. There is a subconscious reaction to tenderness by the contracture of the muscles over the tender area, and this alone, in many cases, is the clue as to the condition with which we are dealing. Perhaps the greatest difficulty of all, however, is to make a correct diagnosis in the common case of a patient complaining of right iliac fossa pain. Take for instance the following cases: Three girls consult you, and each gives a story of vague diffuse abdominal pain confined to the right side. The first is apparently in excellent health, you can make nothing out in examination, but you get a history that she has been vigorously engaged in some sport such as lawn tennis or basket ball, all designed to put a strain on the right lower abdomen. You suspect a strained external oblique, or even a commencing hernia. The second is equally healthy. She tells you that last October she had a rather severe attack of abdominal pain, perhaps with vomiting, that she had to lie up for a week or so, and that she still gets occasional discomfort in the right iliac fossa. You suspect an attack of appendicitis which has not entirely subsided. The third is not quite so healthy or active,

and on cross-examination she admits that the pain has been there for some time, that it gets worse as the days goes on, but is relieved on lying down, that she is tired at night and is constipated. You suspect enteroptosis, and find confirmation on examining her general physique and noting the skeletal changes, the loss of weight, the muddy complexion and the circulatory abnormalities which characterize this most common and distressing malady.

ENTEROPTOSIS.

It is often asked whether roentgen ray is a help in the diagnosis of appendicitis or enteroptosis. The answer is, that it will help but its value must not be exaggerated. It used to be said that a pathological appendix was evidenced if the barium entered the appendix and remained there for a long time, thus showing that the peristalic power of the appendix was diminished by fibrosis of the wall, or if the barium did not enter at all, thus showing obstruction of the lumen. But now we all are agreed, I believe, that no radiological opinions are to be expressed unless the appendix is visualized. If it is, some opinion can be passed as to whether it is tender (a rather doubtful point) or whether it is abnormally fixed. Enteroptosis, or at any rate a pathological hypermobility of the colon, is also very difficult to estimate by roentgen ray. It once was thought that the hepatic flexure was up under the ribs, and the caput caeci above the level of the pelvic brim. We know now that in the erect position in health the hepatic flexure is rarely much above the intercristal line, and the caput caeci is quite often in the true pelvis. The same is true of the transverse colon, which, instead of passing obliquely across the umbilical region up to the splenic flexure, much more often sags in the middle almost into the pelvis. What, then, are the radiographers' evidences of a pathological enteroptosis? They may be summed up as evidence of abnormal fixation and delayed function. If the cecum, or transverse colon are abnormally placed and fixed, that is pathological, and if the barium remains too long in the lower ileum or cecum, this is pathological. From this, one may be led to say, that it is more surgical to free abnormally fixed organs than to fix abnormally free ones.

DIAGNOSIS IN CHILDREN.

In passing, I would like to say just a word as to surgical diagnosis in little children. We all realize that there is where we generally meet the most baffling cases. symptoms, of which colicky pain is the most easily confused with the chronic appendix are caused by tuberculous mesenteric glands. These may occur at any age, however, but are more often seen in children. They give rise to a characteristic train of symptoms, of whic hcolicky pain is the most important. A good deal of discussion has centered around the question of whether chronic appendicitis does occur and cause symptoms in children. The general consensus of opinion seems to point to the fact that it does, and that some, at least, of the indigestion so common in children is due to lesions of that organ. Generally speaking, however, in children, especially in little children, localization is not very exact, and the patient seems to complain of pain in the umbilical region rather than in the right iliac fossa. Of all forms of interval appendicitis in children the mucocele gives rise to symptoms most closely resembling those of tuberculous mesenteric glands.

Finally, I might perhaps suggest that we should all make fewer mistakes in diagnosis in right sided abdominal lesions if we were not obsessed by the everpresent shadow of the appendix.

DISCUSSION.

Dr. V. B. Philpot (Houston): There are just two or three points I might try to bring out in the diagnosis of a few of these conditions.

First, I should like to mention the braid test for duodenal and gastric ulcers. It is not a new test, but I believe it is a fairly satisfactory one. It consists of the use of a freshly laundered braid, something like one inch wide, eight to ten inches

long, the end of which is attached to a string long enough to reach from the stomach well out through the mouth. The patient is allowed to swallow this braid. It goes on down to and one end through the pylorus into the duodenum. After remaining there a certain length of time it is withdrawn by the string. There will be in most instances a stain of blood or black material on the braid where the ulcer is located. Furthermore some idea as to the size of the pylorus can be ascertained by the constriction made on the braid.

Second, a point in reference to the diagnosis of appendicitis was brought out in our local medical society that I would also like to mention. As you know, tenderness over the appendix is the most accurate diagnostic point in appendicitis. Sometimes this is rather hard to elicit due to the fact that the appendix may be distant from the anterior abdominal wall. The patient is lain on a table flat on the abdomen. The appendix then is prone to drop forward after which the hand is brought under the abdomen from the left side and pressure over McBurney's point is made. Tenderness from an inflamed appendix is far more apt to be found in this position, due to the closer contact of the appendix to the anterior portion of the abdominal peritoneum.

Third, there is one other point in the diagnosis of what is generally considered cramp colic; that is pressure over the abdomen will relieve pain, whereas if you have an acute infection, you will cause pain.

Dr. George Brown (Water Valley) I would like to say that in looking at the abdomen from the right side, I think we can oftentimes make lots of mistakes by just looking at it from the right side. I think it is very important to regard the abdomen as a whole. We find lots of conditions that begin with epigastric pain, that may be associated with general abdominal tenderness and genesal abdominal sigidity, if anything, more marked in the lower right quadrant, and yet we may be dealing with an acute pancreatitis. We know, too, in ovarian cysts it may be either on the right side or left side, and I feel it is important to regard the abdomen as a whole, rather than to look at it from a one-sided view point. Some of the pitfalls of abdminal diagnosis are due to not loking at the abdomen as a whole.

Dr. Wm. F. Hand (Jackson): Surgical conditions of the abdomen are sometimes quite difficult to diagnose properly. I recently had a case which simulated appendicitis with abscess formation but on opening the abdomen I found a psoas abscess which had ruptured upward, instead of migrating downward as usual, and there was a large accumulation of pus in the bed of the right kidney.

There is one point in the diagnosis of perforating duodenal ulcer which has recently come to my attention. It may or may not be of value but I think it worth while to bring to your attention. I have recently had four cases of perforated duodenal ulcer, proven, at operation, and three of these cases complained of definite pain just below the tip of the right scapula, pain somewhat similar to that produced by gall-stones, but no stones were present. Incidentally, three of these cases had strongly positive Wassermann tests.

Dr. E. C. Parker (Gulfport): Just a few little things. I would like to throw out a suggestion in the diagnosis of appendicitis. I have found in my experience a few points that have been worth a great deal to me. When I start to examine the abdomen, I start on the left side. On the left side, directly opposite the appendix, I do a percussion. If you have an appendicitis, the percussion will refer back to the right side. Then place your hand in and withdraw it quickly and that will refer back to the right side. Then I will come to the right and left sides, two or three millimeters from the umbilicus and press there. If you have a kidney or ureteral involvement, it will produce severe pain. I leave the appendicular region as the last part of the abdomen to examine, but I would like for you to try using the pressure two or three millimeters to the right or left of the umbilicus. If that is painful, you had better look out for either stricture of the ureter or kidney complications or a kink in the ureter.

Dr. C. C. Hightower (Hattiesburg): Of course the doctor didn't start out to enumerate all the things that might happen on the right side, but I thought perhaps that some of us have had some unusual things on the right side and it might be interesting to mention them. I want to mention one I had. The patient had all the symptoms of acute appendicitis. I opened up the abdomen and found a complete tumor of the great omentum. I took the entire omentum out. That was the only trouble the patient had and there was complete recovery.

Dr. G. E. Eddy (Heidelberg): In regard to appendicitis in children, parasites are often the cause of the pain we have near the umbilicus. In our country, where we have so many hookworms, so many intestinal parasites, it is very commonly true that the appendicitis in children is due to intestinal parasites. I thought for a long time worms had gone out of style with children, but lots of them are wormy. Intestinal parasites have a great deal to do with the pain near the umbilicus in children and possibly a lot of their appendicitis is caused by that.

Dr. Armstrong (closing): I want to agree with Dr. Parker in the face we should examine every other part of the abdomen first, leaving the appendix to the last. We usually go in with the idea of appendicitis, but we should rule out everything else, and leave the appendix to the last.

PYELOGRAPHIC STUDIES WITH EMULSIFIED LIGHT BROMINOL.*

W. A. REED, M. D.,
and
W. F. HENDERSON, M. D.
NEW ORLEANS.

The subject of urography may be considered by some of you to be appropriately discussed only before a group of urogologists and roentgenologists. However, the marked advance that has occurred in this procedure has made it such a valuable aid in the diagnosis of obscure renal conditions that it is being utilized more every day, until it now compels the attention of the internist and general surgeon equally as much as it does the urologist and roentgenologist.

Almost thirty-five years ago the ambition of visualizing the urinary tract was expressed by Tuffier who suggested that the course of the ureters might be outlined in a radiogram if they were catheterized by bougies that were opaque to the roentgen ray. Consequently in 1901 and 1902 we find Kolischer, Lowenhardt and von Illyes utilizing the idea in the employment of catheters into which were placed fine silver wires. In 1905 Fenwick improved this procedure by the construction and use of catheters whose walls were impregnated with lead. However, the year previous to this Klose had gone one step further and attempted to outline the renal pelvis by injecting it with bismuth sub-carbonate, but the procedure failed because of the uncertainty of the shadows cast and the irritation produced by the retention of the bismuth.

Finally, success was achieved in 1906 when Voelcker and von Lichtenberg were able to obtain for the first time a satisfactory outline of the pelvis and ureter by filling it with a colloidal silver, known as collargol. At first a 2 per cent solution and later a 5 per cent solution was used, and for several years the procedure held an important place in the field of diagnosis. Within a short time, however, it was found that collargol frequently resulted in extensive renal destruction, and its use was almost entirely abandoned.

During the following years many different methods for outlining the upper urinary tract were tried, Burkhardt and Polano advocating oxygen as a medium in 1907, argyrol by Keyes in 1909, cargentos by Uhle and Pfahler in 1910, zeroform in oil by Doderlein and Kronig in 1913, and finally silver iodide by Pfahler, Kelly and others in the same year. It was during these early years of experimentation that Baker for the first time suggested the use of gravity for filling the pelvis with the chosen pyelographic material. At the same time many disastrous results from pyelography were being reported, ranging in severity from edema of the kidney with shock, to rupture of the pelvis or destruction of the kidney and death. This of course resulted in further studies with regard to the amount of pressure necessary to produce injury to the kidney. Foremost among the investigators of the subject was Tenant who in 1913 found that a pelvic pressure of 40 m.m. of mercury was sufficient to infiltrate the kidney proper and who therefore suggested that the pressure used never be allowed to go over 30.

The most notable advance was made by Burns in 1915 who for the first time employed an electrolyte, thorium nitrate, as a pyelographic medium, which, while it produced very satisfactory shadows, was soon discarded because of its toxic effects

Finally, in 1918, Cameron suggested the use of a 25 per cent solution of potassium iodide. The same year Weld reported splendid results from sodium bromide. Both of these media cast better shadows and were less irritating than anything that had been used up to that time. Later, Cameron substituted sodium iodide for the potassium iodide in a strength of 12.5 per cent. It was very soon realized that of the two, sodium iodide was the superior, and within a short time it became the accepted medium for pyelography.

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In spite of the fact that sodium iodide produced excellent shadows, it also occasionally caused considerable pain, and at times renal suppression of a more or less marked degree occurred. Consequently, it was generally conceded that the ideal pyelographic material remained undiscovered.

Following the lead of Sicard and Forestier, who in 1923 found that iodized poppy seed oil made an excellent medium for outlining body cavities, there have been produced a number of both oily and aqueous combinations that cast pyleographic shadows equally as well and with far less discomfort to the patient than sodium iodide. The best of these are emulsified campiodal, introduced by Frazier and Glaser, with the aid of George Raiziss, and light brominol, both of which were produced in the Dermatological Research Laboratories.

The radiograms that we wish to show have all been made with an emulsion of light brominol.

Emulsified light brominol is a stable grayish, white, oily emulsion of bromine, oil, acacia and water. It contains 40 per cent of bromine, has viscosity of about twice that of water, is non-irritating, of very low toxicity and casts very satisfactory roentgenographic shadows.

As you readily appreciate, the cardinal requirements of an ideal pyelographic medium are:

(1) That it must be sufficiently liquid to be easily injected.

(2) That it cast a dense shadow.

(3) That it be readily miscible with urine.

(4) That it be sufficiently inert as to allow the making of bilateral pyelograms with safety.

(5) That it be non-toxic, and produce little or no pain or shock to the patient.

All of these requirements we believe are fulfilled by emulsified light brominol.

It is easily injected through catheters of the smallest size.

It casts shadows of sufficient density to bring out the minutest detail even in markedly obese individuals.

The ureters are particularly well visualized since this medium, while sufficiently liquid to flow easily, still posesses a viscosity that causes it to adhere to the ureteral walls longer and better than sodium iodide. Furthermore, a dense shadow is produced with a lesser concentration than is required with sodium iodide.

It readily mixes with any urine or water that may be present in the renal pelvis and never results in the formation of confusing globules of oil or air so frequently seen when using other oily preparations.

Bilateral pyelograms are made routinely and without fear of shock or temporary renal suppression.

Negative stone shadows are plainly visible.

Up to the present time a pyelovenous back flow has never been noted following its use.

Since emulsified light brominol is white in color, one is usually able to determine when the renal pelvis and ureter are completely filled even before the patient experiences a sensation of fullness in the kidney area by observing through the cystoscope the moment that it spurts out into the water filled bladder alongside the catheter.

And finally, but certainly the most important factor in its favor, is the freedom of distress to the patient following its use. We have employed it in the making of both unilateral and bilateral pyelo-ureterograms, as well as cystograms and urethrograms in at least one hundred cases, in many of whom there was extensive renal pathology and in none of these was it necessary to administer more than an occasional dose of aspirin and codeine to relieve the discomfort caused by the procedure, regardless of whether the patient was ambulant or hospitalized.

Inspection within the bladder the day following the use of emulsified light brominol as a media for obtaining a cystogram

shows the mucosa to be completely free of the intense inflammation that invariably results when using sodium iodide. Consequently, one may reasonably deduce that it acts equally as kind when injected into the renal pelvis.

There is, however, one feature in the use of emulsified light bruminol to which there may be some objection. This is the fact that, due to its white color, the visual field within the bladder become clouded because of its regurgitation down the ureter after the pelvis has been filled for pyelogram.

As a rule, however, the inspection of the bladder has already been completed, so that, this possible objection, in my opinion, is of little consequence.

With the present rapid progress and widespread interest in intravenous urography, it is only reasonable to anticipate that some of you are wondering why retrograde pyelography is still being practiced. While it is quite true that normal or near normal kidneys can be made visible by this method, allow me to remind you that in an organ whose excretory function is impaired even to a moderate degree the elimination of any intravenously administered preparation is never sufficient to cast a satisfactory shadow in a radiogram, and it is in just such kidneys that we are especially desirous of learning the actual shape and condition of the renal pelvis and calices. Furthermore, there is always the risk of an adverse reaction following the use of any intravenously administered preparation. And, too, the several manufacturers of the various brands of combinations used for intravenous urography plainly state that its use in contra-indicated in "cases of serious bilateral impairment of renal functions," which immediately rules out a fairly large group of cases in whom retrograde pyelography with emulsified light brominol can be used with impunity.

It is our belief, therefore, that emulsified light brominol more nearly fulfills the requirements of an ideal pyelographic media than anything yet advocated or used.

Dr. Henderson, who has been a co-worked with me from the roentgenological side, will now demonstrate to you a few slides of the many pyelograms that have been made with this new preparation.

DISCUSSION.

Dr. R. L. Gordon (New Orleans): I have not used this particular agent in urography, but if it does all that is claimed for it, I would say that it surpasses practically every method we have at our command. I have been told that with this medium it is possible to do a cystogram one day and the next day have a bladder with no sign of inflammation. This must be a pyelographic agent of extraordinary mildness, and in view of the pictures Drs. Reed and Henderson have shown, certainly must be very effective. I also understand that there is no pain following its use and that shock is absent. Both of these complications follow the older methods.

Dr. M. H. Foster (Alexandria): I have done considerable work with opaque media, especially lipiodol, but I have not used light brominiol. Lipiodol is too heavy to use through the catheter, as it must be used in this work, and a substitute for it will be most acceptable, though sodium iodide has given me very satisfactory results.

I rise to comment on the association of appendicitis and kidney disease. Two striking cases come to my mind. A young soldier who had been operated on for suppurative appendictis 8 days later developed pain in the left loin. On catheterization 50 or 60 c.c. of foul, fetid fluid was withdrawn, and more bacteria were present than I had ever seen. That was months ago and he is still under treatment. A young girl was operated on for suppurative appendicitis, and 8 or 10 days later a pyelogram disclosed a destructive pyonephrosis on the left side. She is still draining pus from that lesion. I mention these two cases to show that a dangerous appendiceal condition does not eliminate a grave renal lesion.

Dr. H. W. E. Walther (New Orleans) What bactericidal value has light brominal? Has it been studied from this standpoint? It seems non-irritating, if we are to judge by the grave cases in which it has been used. I have had no personal experience with it, and I have never been able to reconcile my conscience to introduce anything containing oil into the ureter, but I may come to it if this agent does all that is claimed for it by a conservative urologist like Dr. Reed.

Dr. W. A. Reed (closing): In answer to the discussion of Doctor M. H. Foster, I wish to state that we have not hesitated to use emulsified light brominol in the face of severe infections, and we

cannot see that it has done any damage. Certainly we could determine none.

As to its bactericidal effect, a question asked by Dr. H. W. E. Walther, I am not sure that it possesses any. When we first began to use it, the Abbott Laboratories put it up with metaphen; recently we have been using it without this addition, and we see no difference in the results.

As a matter of fact, we all know that it is not so much the introduction of bactericidal substances into the kidney which produces results as the drainage and dilatation of the ureter, which the passage of the catheter and the use of water alone would probably achieve without the introduction of anything else.

This is not a true oily preparation. If you have a few drops of it between your fingers, you can make out the oily content, but it is not a heavy oil and we do not hesitate to use it in the kidney. Heavy brominol might remain in the pelvis of the kidney because of its extreme weight and thickness, and thereby produce some irritation, but this agent is entirely different and at no time has it produced effects of an adverse nature.

NON-UNION OF FRACTURES.*

G. C. BATTALORA, M. D.,

NEW ORLEANS.

Because of the increase in freqeuncy of occurrence of fractures in recent years there has been a stimulating of research in fracture problems. One of the most interesting of these problems is that of non-union. There has been not only an increase in the incidence of fracture cases but a relative increase in the proportion of non-union cases. This may in part be accounted for by the severe types of fractures met as a result of industrial and automobile accidents. In various large series of fracture cases the occurrence of non-union has been placed at between two and five per cent.

Much has been written concerning the general causes of non-union, such as nervous disorders, constitutional diseases, syphilis, malnutrition, primary and secondary anemias, and senility, but the most important factor in its occurrence seems to be a local one. With regard to syphilis, in my experience, this causes delayed union in a much larger proportion of cases than non-union. How many times do we see fracture cases in which the Wassermann is positive but in which the healing follows a perfectly normal course? I do not mean to imply by this that active treatment of the syphilis should not be instituted immediately, because by doing this the patient's general health is improved, and any factor causing improvement in health is reflected in a speedy union of the fracture.

As to the local causes of non-union, infection, separation of the fragments, loss of bone substance, and interposition of soft parts are the essential factors. In infected compound fractures non-union occurs much more frequently than in simple closed fractures. This is most probably due to the overgrowth of fibrous tissue stimulated by the infectious process resulting in dense scar tissue. Cowan, in his experimental work, has shown that non-union may result where there is an overabundance of granulation tissue derived from the periosteum, in which the fibrous element predominates, crowding out the less virile endosteal granulation tissue. In these cases the hypertrophic granulation tissue begins contracting before there has been deposited a calcium groundwork, thus obliterating the blood vessels, with the resulting development of dense scar tissue. The endosteal granulation tissue, which is prevented from extending beyond the ends of the fragments due to the excessive development of the granulation tissue, forms an endosteal callus within the marrow cavity at the fracture site, thus forming plugs which become calcified. It is thus plug that has to be opened at the time of operation of bone-grafting to allow the endosteal osteoblasts to become again active. This may be the cause of non-union in that group of fractures, particularly noted in the lower third of the tibia and in the middle third of the humerus. Cowan is of the opinion that this excess proliferation of ese periosteal granulation tissue is present where there is consider-

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able laceration and separation of the periosteum.

In cases where there is wide separation of the fragments, union fails because of the inability of the osteogenetic elements to bridge the gap. This is frequently the case in fractures of the patella due to muscle action on the proximal fragment, and for this reason immediate operation in these cases is indicated. This condition is also noted in cases where excessive traction is used as in fractures of the femur and of the humerus.

In treating markedly comminuted compound fractures every effort should be made to conserve as many of the bone fragments as possible. Just because a bone fragment has been separated from its periosteal at tachment is no reason it should be removed. Failure to observe this principle may result in the most severe type of non-union, with total loss of use of the limb. This type is exemplified by a case of a young woman of 25 years who had sustained a gunshot fracture of the middle third of the right humerus. Initial treatment in this case consisted in a thorough debridement including very one of the comminuted fragments. The case was seen by me eight months later with the following condition, non-union of the humerus with a three-inch gap between the fragments and marked osteoporosis of the fragments. It is probable that if a more conservative line of treatment had been followed at first a different result may have been obtained.

In any complete fracture of a long bone where crepitus cannot be elicited, interposition of soft parts should be suspected. This may vary from interposition of a strip of periosteum to that of a thick muscular mass. This is usually the case in long oblique fractures of the middle third of the femur. In this type the sharp end of one of the fragments becomes engaged in the surrounding muscular tissue and no amount of traction will disengage it. In this group early operation should be indicated.

Besides these factors, any condition causing motion at the site of fracture may cause delayed union or ultimately, non-union. This is explained by the fact that movement of the bone fragments causes some breaking up of the soft callus or precallus granulation tissue with hemorrhage resulting. This additional hemorrhage results in additional granulation tissue formation which on maturing causes obliteration of the local blood supply. This contradicts the general belief that a little motion at the site of fracture is beneficial. Therefore any fracture which has not undergone complete essification should be very carefully handled, fixation during the course of treatment should be efficient, and too early weight-bearing should be prevented. The ideal treatment of any fracture is one that brings about reduction at the earliest possible moment, before there is extensive extravasation of blood into the surrounding tissues, and one which provides for adequate immobilization until union has occurred. The old adage "splint them where you find them" cannot be too forcibly impressed, in fact, "reduce them where you find them" may be a better rule. During the early part of 1930 there was admitted to the colored male fracture service at Charity Hospital a case of fracture of the middle third of the femur of 6 weeks' duration in which there was end to end apposition of the fragments but with about 45 degree angulation. Roentgenograms showed the presence of a large callus, and clinically the fracture was firmly united. Under an anaesthetic it was possible to forcibly correct the malposition, and a plaster spica was applied. Skiagraphs made four weeks later showed complete absorption of the callus with absolutely no effort at union. Fortunately, after a very prolonged period union was again established.

Non-union differs from delayed union in that the former is a terminal state. In true non-union no method is of any avail except operative procedures. In delayed union much can be done to hasten ossification.

Functional use of the limb, with support, is indicated. In fact, any and every measure which will improve the local blood supply should be instituted. Among these may be mentioned passive hyperemia at the site of fracture, massage, diathermy, sinusoidal current and general ultraviolet ray exposures. The effect of passive hyperemia has been experimentally corroborated by Pearce and Morton. They found that by ligating the main venous trunk coming from the site of a fracture that ossification may markedly accelerated. Clinically this may be done by applying a sphygmomanometer to the limb proximal to the site of fracture and inflating the rubber cuff until the circulation is entirely cut off, and then deflating the cuff until pulsations are noted in one of the distal arteries. The pressure is maintained at this point for a variable period, depending on the tolerance of the patient, and repeated at stated intervals during the day.

Numerous drugs are advocated in delayed union. The most frequently used of these are calcium salts, parathyroid extract, and viosterol. The basis for their use has been the work of Petersen. He contends that in cases where the product of the numerical values of the blood serum calcium and phosphorus per 100 c.c. of blood falls below 35 delayed union or non-union results. Numerous other observers have failed to corroborate these findings, and the concensus of opinion is that these determinations are valueless. As a matter of fact non-union may result in cases where the numerical value is much higher than this, and rapid union may result in cases where the numerical value is much higher than this, and rapid union may occur in cases where the value is much less.

None of these measures are of benefit in cases of true non-union, although in a recent article E. J. Berkheiser of Chicago has presented a small series of cases of apparent non-union in which he has obtained union by the oral administration of a mixture of calcium salts, phosphorus, magnesium salts and silicic acid in the proportion in which they are found in normal bone.

Treatment of non-union involves the following principles: (1) removal of all fibrous tissue from about the site of fracture; (2) accurate reduction of the fracture; (3) stimulation of osteogenesis by bone-grafting; and (4) prolonged and efficient fixation following operation.

In certain recent cases of non-union, notably those where there is marked displacement of the fragments or interposition of soft parts, simple approximation of the fragments with freshening of the bone ends will suffice. This is exemplified in fractures of the middle third of the femur or humerus. Fixation (internal) may be obtained either by the use of a Lane plate or by the use of absorbable material such as kangaroo tendon. External fixation should also be used.

In cases of long standing, especially in those cases where there is marked osteoporosis of the fragments, stimulation of osteogenesis should be brought about. This is most effectively brought about by the use of autogenous bone grafts. In speaking of bone grafts I have reference only to autogenous grafts, for these are by far the most efficient. Bone grafts may be classified into three types: (1) intramedullary, (2) inlay, and (3) onlay or splint grafts. In the latter class may be included osteoperiosteal grafts. The use of the intramedullary graft should be discontinued because by its use the marrow cavity is cut off at the site of fracture, thus preventing the formation of endosteal callus which is one of the important elements in union.

The sliding bone graft should be used only in recent cases of non-union, that is, in those cases in which there is not marked osteoporosis. In cases of long standing, the graft should be obtained from some source other than the fractured limb. Osteoporosis of the fragments implies low osteogenetic power, and if the graft is obtained from near the fracture site absorption of the graft may follow. By securing a heavy

graft from healthy bone, we not only introduce into the field an element that will stimulate lagging osteogensis but we feel that there is much greater chance of survival of the graft. The technic of this type of bone-grafting is classical and needs no further elaboration. Suffice to say that the graft should be fixed firmly to its bed and efficient external fixation applied. A well molded plaster cast is the best support. This should be applied to include the joint above and below the site of fracture, and should not be fenestrated for dressing of the wound. If for any reason inspection of the wound is indicated the cast should be bivalved. In a fenestrated cast there develops some edema in the soft parts at the site of the fenestrum, and disturbances in the local circulation usually result. Use absorbable skin sutures to avoid the necessity of opening the cast for suture removal.

The cast should not be removed for a prolonged period as calcification may be markedly delayed. The time for removal to inspect the limb should be from about 6 to 8 weeks after operation. If union is not firm a new cast should be immediately applied.

In certain cases where there is a gap between the fragments and where the ends of the fragments are tapered conically, a massive onlay graft is indicated. The graft is removed from the tibia and the endosteal surface smoothed so as to form a long bone plate. The exposed surface of the fragments should be chiseled flat to receive the graft, and the graft held in position by means of bone pegs. This type of graft was first advocated by Willis Campbell. The case mentioned earlier in the paper where there was a 3-inch gap in the humerus was treated by this method. The bone fragments were so atrophic in this case that it was possible to trim them to the required shape with Mayo scissors. This marked osteoporosis probably accounted for the prolonged delay in ossification, for there was no roentgenray evidence of bone proliferation until six months following fracture. Utimately firm union resulted, and function of the arm was good.

In cases where there is no displacement of fragments Phemister advocates the use of simple splint grafts laid across the fracture line and held in place by suturing of the soft parts. He also uses this method in cases where there has been infection, and he approaches the site of fracture from the opposite side to that in which the infection was last active.

In exposing the site of non-union, all dense fibrous tissue should be removed. It will be found to be densely adherent to the ends of the bone fragments. It is also very important that the marrow caviety of each fragment should be opened.

In cases where infection has played a part operation should be deferred for a period of at least two months and preferably six months after complete healing of the skin wound. If operated too early some latent focus of infection may be flared up, resulting in death of the graft. These cases should be subjected to a course of heavy massage and infra-red exposure for a period of 10 days prior to operation. If there is no signs of recurrence of infection is safe.

The fate of the bone graft is still a debated question. Some claim that the graft merely acts as a bridge and takes no active part in osteogenesis. Albee is of the opinion that the graft survives. Recent experimental work tends to confirm this belief. Of particular interest is the work of Davison and Kraft in which they transplanted bone from dogs who had been fed on a diet containing madder root dye. This substance colors developing bone red, so that if fed to puppies for a variable period all the bones will be colored. If the bone dies it gives up the read dye. In their experiments where the red bone was transplanted to beds prepared in the skull of an animal not receiving the dye, the red color of the graft persistee, showing that there had been no necrosis in the graft, but that primary union had occurred.

In conclusion let me again stress the fact that non-union or delayed union may be prevented in a large percentage of cases if careful attention is given to all details of the early treatment of fractures.

DISCUSSION.

Dr. Isidore Cohn (New Orleans): The first thing which ought to be emphasized is that too frequent attempts at reduction prevent union, and this practice should be avoided. We ought to treat fractures, not roentgenograms, and that is what many are doing. Peterson has stated that the product of the calcium and phosphorus in the blood plays an important role in determining whether union will occur. Speed has shown experimentally that this conclusion is not justified. There is an increase in these elements immediately after injury, and the increase is undoubtedly maintained until normal healing occurs, but the product has nothing to do with the result. The question of the absorption of dyes was revived by Barney Brooks 12 or 15 years ago. This idea of the absorption of dyestuffs by growing bone originated with Duhamel (1739) nearly 200 years ago. After feeding animals food soaked in madden he found that only the new bone showed evidence of its absorption.

If open reduction is done, some form of internal splinting must be done also. We speak glibly of bone operations, but they are major surgical procedures, and ought to be so regarded. Infection or the smallest movement at the site of the fracture will invalidate the whole operation.

The interposition of the soft parts and the formation of cartilage over the ends of the bone will prevent union, no matter how elaborate the manipulations are that are undertaken to destroy it. Nothing but operation helps such a case. Impaction is a rather potent source of non-union, especially in the aged, and I cannot accept Cotton's claims for the good results of artificial impaction. Impaction interferes with the blood supply, which is already none too good at the head of the femur, for instance, and I cannot see how it can do anything but prevent union.

Dr. E. D. Martin, (New Orleans): Dr. Cohn has discussed this question from the theoretic side, so I shall show only the practical. My own opinion is that the bone graft not only acts as a splint but that it furnishes actual pabulum from which the old bone is fed. An old technic was actually to tear the ends of the bone, and I have done it many times with excellent results; it seems to stir up new bone production.

Non-union is due in nearly 100 per cent of all cases to improper placing of the bones. If you want union, you must put the bones in position and hold them in position long enough for it to take place. In forty years of practice I have never had a case of non-unoin because I was early taught the importance of holding fractures in place. We did not have the roentgenogram in those early days and we had some very poor results, but we usually got union. Syphilis will prevent union, but so will any other disease; it is simply a question of lowered vitability and not the effect of the specific disease.

With the roentgen ray and with the improved technic of today we can get away from plaster and I am glad of it. I rarely use it any more, even in factures of the femur, and when I do use it at all, it is merely as a posterior splint. Use a bone plate if necessary, screw it carefully into position with long enough screws, but don't use plaster.

The younger the patient is, the better the chance of union, no matter how the fracture is set. I saw a child yesterday with a lateral separation of at least half an inch, but callus had been thrown out and union was perfect. Contact is not necessary.

Most men do not appreciate the importance of a correct technic in plating or wiring bones. It can't be learned from a textbook. When you put a foreign body in the bone, you must put it there so firmly that it is going to remain in place. If you use the wrong kind of screws or put them in incorrectly, they will not hold, and an abscess of the medulla and necrosis is not an unusual result. No operation requires more skill and experience than this variety of plating or wiring the bone in cases of non-union.

Dr. P. A. McIlhenny, (New Orleans): Dr. Battalora has mentioned ligation of the veins to increase the formation of calcium. When Bier was developing his method of active and passive hyperemia in 1903 he published some experiments in regard to the calcium increase which he was able to achieve. He used passive hyperemia for the fracture of one extremity, the ordinary splint for the other one, and there was no question but that union occurred more promptly on the first side because the venous flow was partially occluded by the elastic constriction, and callus formed more rapidly.

A bone which is put up in a faulty position with inadequate support had better be left ununited. I have no hesitancy in making the dogmatic statement that anybody who undertakes to do bone surgery must be a good carpenter or cabinet-maker, for the same sort of dexterity is required. Moreover, when the facture has once been set and external fixation secured, let the part alone, don't look at it every one in a while to see that infection isn't developing. We should be certain that infection is not present before we

begin to operate. I cannot agree with Dr. Cohn in regard to bone impactions. I don't believe they should ever be broken up. They may possibly interfere with the blood supply, but they also serve as a splint, and I never saw an impacted fracture which was followed by osteomyelitis or death of the part.

Dr. Guy A. Caldwell, (Shreveport): I quite agree with all that has been said relative to complete reduction at the time of the fracture. A good reduction plus adequate fixation of the part afterwards, will do much toward eliminating non-union in all cases.

I am frequently surprised to find patients referred with the idea that they can be operated on even while their wounds are still draining. It is perfectly futile to attempt correction of non-union in the presence of infection. The wound must have been healed at least two months, and preferably much longer, before considering operation.

We recognize osteo-porosis as militating against union and we should certainly eliminate it as far as possible by waiting for complete healing and restoration of proper circulation in the part, especially if a bone grafting operation is being considered. The patient's limb may be put in some sort of brace or apparatus which makes movement possible, so that the blood supply may be restored as much as possible by use for several months. I have operated on a number of these cases in which previous attempts by competent surgeons had failed. I succeeded, not because I am a better surgeon, but because the factor of delay and use of the injured member had given me an advantage which they did not possess.

The scare cannot be ignored. It should be well healed, the circulation should be good, and the underlying tissue soft. If there is a large, dense scar it is better to excise the scar, remove the fibrous tissue interposed between the bones, cover with a skin graft and permit healing before attempting the bone grafting.

Dr. N. H. Polmer (New Orleans): Laying aside local causes, assuming that there is the proper alignment of the fragments and correct immobilization, we still see cases in which union is delayed, and I rise to point out a valuable adjunct to surgery. It has been shown that during the period of bony growth, at the time when the epiphyses are ossified, there is a large amount of calcium and phosphorus in the blood serum, more so than at any other time. Moreover, Tynsdale and Harris in 1922 showed that after fractures there was always an increased production of these substances, their work being done experimentally on dogs. It has therefore been the practice of many surgeons in cases of delayed union to try to increase the calcium production in the blood by the administration of calcium, cod liver oil and viosterol. Ultra-violet irradiation over the entire body has actually the same effect as the ingestion of these substances and is as nearly a specific treatment as we can hope to arrive at. Hess and many others have shown that irradiation with the air-cooled violet lamp is followed by an increased production of calcium and phosphorus, and by clinical and radiologic evidence of healing. Locally, we can increase the circulation by hyperemia with radiant light and heat or diathermy.

Dr. Muir Bradburn (New Orleans): In reviewing the fractures we have had in our service for the last twelve months, I find 15 cases of non-union, 3 of the femur, 1 of the ulna, 7 of the tibia, 1 of the humerus and 1 of the internal mallealus, We have not found it necessary to make of bone grafting the major procedure it is so frequently considered. We did it in nine of these cases and we had perfect union in all nine. We failed in one case on an old man. In one case of non-union of the femur, instead of doing a sliding graft, we made a two-stage operation of it. In the first step we merely put the fracture in position with a Lane plate, and after sufficient fibrous union had occurred, we applied a graft. In other cases we used either a sliding graft or the usual type, and our results were entirely satisfactory.

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THE AMERICAN MEDICAL ASSOCIATION MEETING.

Eleven years ago the American Medical Association met in New Orleans. The approaching meeting which will occur within the next week will be the fifth time that the organization has met in the metropolis of the South. Each of the meetings that has been held in New Orleans has been characterized by a splendid presentation of medical subjects, and usually has been associated with some outstanding contribution to some one or another phase of medicine. The present meeting, judging from the advanced program, seems likely to be the equal at least and possibly will surpass any previous meeting. Of outstanding interest to most physicians undoubtedly will be the symposium on economic problems which will be participated in by men who are well acquainted with some of the enigma of practice. The scientific exhibit alone is a demonstration of the advancement in medicine, at which a physician could spend three or four days without attending the other sessions just to learn and to see what is being done nowadays in medical advancement.

Here, we, the physicians of Louisiana and Mississippi, have at our very door an outstanding distinguished group of physicians who will give clinics, public demonstrations, and discussions on many and varied features of medicine. Here will be an unsurpassed scientific exhibit, and here will be other features, the sum total which will make up the greatest medical meeting in this country.

Again we appeal to physicians in our two States to whom this Journal goes, not to mention those of the other surrounding States, to drop everything and to attend this annual gathering of American physicians. The opportunity is so wonderful that it seems almost ridiculous to urge physicians to come to the meeting. Nevertheless, there are a few men who on various pretexts will pass up the chance of participating in the meeting. Do not let anything come up to keep you away; get to the meeting and stay there, three, four or five days.

MEDICAL ECONOMICS.

In spite of the compaints that the laity express regarding the lack of medical attention for people in rural sections, the average doctor in communities of any size realizes and appreciates fully that he could do more than he is doing, and that the number of doctors is more than adequate for the care of the sick, except possibly in sparsely settled rural districts. In the larger communities the supply is not only ade-

quate, but there is an over abundance of physicians so that competition becomes keen, and certain practices often bordering on the unethical are followed by these doctors not in organized medicine in order that the physician may at least make a living. It is conceded that the medical profession is over crowded in many places, and that there are too many physicians in most communities. However, our situation is not nearly so serious as it is among some of the professions allied to medicine. Witness the large number of nurses that are being turned out everywhere by hospitals throughout the country. Startling revelation of conditions is given by a pamphlet from the American Nurses Association, which shows that in a group of 42 cities the average nurse will have no more than 149 days of employment in the year. In some cities over crowding certainly is giving the nursing leaders great concern. In one state, whereas in 1900 there was one trained nurse for something over every 5,000 population, in 1930 there is one for every 349. The pharmacists are equally over abundant. The Committee on the Costs of Medical Care states that no more than 10,000 pharmacists will be required to fill the 165,000,000 physicians' prescriptions annually compounded, whereas actually there are 115,000 registered pharmacists. Fortunately, the pharmacist is able to relegate the compounding of prescriptions to a minor role; most of his time is spent in retailing drugs, toilet articles, and whatever it is that drug stores sell. Only approximately one-quarter of the $715,000,000 spent for medicines in the United States is prescribed by doctors.

All these figures and these data excite apprehension. In the few countries where the medical profession and the allied branches are over crowded the practice of medicine is on an extremely low plane. If the United States continues to send out doctors, pharmacists, and nurses each year by the thousands, the future of the neophyte physician, pharmacist or nurse does not seem particularly bright.

SERUM PROTEINS IN HEART DISEASE.

Although Starling, nearly forty years ago, called attention to the importance of the osmotic pressure of non-diffusible colloids, principally serum proteins, in the interplay of fluid between the tissues and the blood stream, it is only in the last few years that really serious attention has been paid to the importance of loss of serum proteins in the production of edema. Out standing examples of edema of this kind are seen in famine edema and nephrosis, but undoubtedly in many other pathological disturbances dimunition of serum protein is responsible in part or wholly for the production of edema. In congestive heart failure various factors are at play to produce edema. Increased capillary pressure and increased capillary permeability as a result of anoxemia are certainly two factors of primary importance, but in a recent study by Payne and Peters* it is shown that a minor but nevertheless distinctly important accessory in the edema of congestive failure is the loss of serum protein, or at least a hypolabuminemia. The loss of albumin from the blood stream might be ascribed to several factors; for example, a certain relatively small amount of protein becomes useless for body needs when it escapes into an effusion; an inconsiderable loss occurs as a result of albuminuria, but the investigation of these two workers calls attention to an undoubted extremely important contributory factor to explain serum albumin deficit and one which can be in most instances successfully managed by the physician. This particular factor is malnutrition so that in certain instances it is possible to prevent or correct the serum albumin deficiency that occurs in

*Payne, Sheldon A. and Peters, John P.: The plasma proteins in relation to blood hydration. Jour. of Clin. Invest., 11: 103, 1932.

congestive failure. It is a common practice to restrict the diet, and particularly protein in the diet, when heart failure occurs. Payne and Peters realize that under certain conditions marked anorexhia and nausea as a result of gastric passive congestive or possibly as a result of drug administration may make it extremely difficult to feed properly the cardiac patient, but in a great majority of instances proper types of foods, including generous quantities of protein as well as sufficient calories, may be given in such a way as not to put too much strain on the digestive apparatus of even an old arteriosclerotic patient with edema. This diet can be made appetizing and stimulating to the gustatory senses without an excess of salt or fluid, and at the same time be capable of supplying the protein deficiency so that one of the complications of heart failure may be controlled reasonably adequately. Heart failure is a wasting condition and should be treated as such.

HOSPITAL STAFF TRANSACTIONS

FRENCH HOSPITAL.

A regular meeting of the French Hospital Staff was called to order Thursday, April 14, 1932, Dr. H. B. Alsobrook presiding. The minutes of the last meeting were read and approved. The secretary read the report of discharges for the month of March 1932. There were only three deaths during the previous month and these were relatively unimportant.

Dr. Alsobrook then presented Dr. Charles J. Broom who spoke on calcium therapy. The use of calcium is not limited to rickets but is also given in bronchial asthma, maxillary sinusitis, tuberculosis and patients who show a prolonged bleeding and coagulation time. In 1929 his attention was called to dicalciumphosphate. Through numerous experiments with rats this product showed: (1). That calcium in dicalciumphosphate is utilized 70 percent more efficiently than when given in citrates or carbonates. (2) That dicalciumphosphate therapy results in the prevention and cure of rickets, that is, it raises or maintains the minimum 40 per cent of bone ash that the body demands. (3) It is more soluble in water or in the amount of HCl found in the stomach than other salts. Dr. Bloom's work is of a highly scientific character and is altogether thorough as his experiments carried out on rats, sheep, and children all show the same fine results.

The chairman then announced that the next staff meeting would be held on the third Thursday of May instead of the second Thursday so as not to conflict with any function of the A. M. A. Convention.

Cuthbert J. Brown, M. D.

SURGICAL STAFF OF CHARITY HOSPITAL.

The Surgical Staff of Charity Hospital held its regular monthly meeting on April 20, at 8:00 P. M., in the Nurses Auditorium. Fifty-seven members were present. The minutes of the previous meeting were omitted. There were no committee reports heard and there was nothing to consider under new, old, or unfinished business. The meeting then passed to the scientific session, and Dr. Mattingly presented a case of echinococcus cysts of the liver, which was discussed by Drs. Maes and Tripoli. Dr. Von Haam from the Pathological Department then demonstrated autopsy specimens from a series of cases showing postoperative complications of the gastro-intertestinal tract. These proved of much interest, and were discussed by Drs. Maes and Danna. It was moved and passed that the next meeting consist of a symposium on thyroid diseases with especial reference to treatment.

There being no further business the meeting adjourned.

G. C. Anderson, M. D.

CHARITY HOSPITAL MEDICAL STAFF MEETING APRIL 19, 1932.

The regular monthly meeting of the Medical Staff was held on this date, Dr. Oscar Bethea presiding in the absence of Dr. Durel.

Dr. I. Robbins presented two instructive cardiac cases. The first of these, a colored male, aged 33 years had been diagnosed as true organic mitral regurgitation with congestive heart failure and syphilitic hepatitis. There were several interesting phases of the case suggested by Dr. Robbins and a discussion of some of the diagnostic possibilities. The patient had been admitted to the hospital January 13, 1932, with a history of a gradually developing edema of the ankles beginning about one year previously. The edema had spread up the lower extremities, and later ascites and edema of the eyelids developed. He had lost about 20 pounds during that year. There were no other outstanding symptoms. The past history showed no acute infectious diseases and no venereal diseases. Upon physicial examination the essential positive points noted were as

follows: The temperature was 99.2°, blood pressure 130-90. There was marked oral sepsis. There were subscrepitant and sonorous rales over both lungs. The P. M. I. was in the sixth interspace, 13 cm. from the mid-line. There was a systolic thrill over the apex and a systolic murmur at the mitral area, and heard diffusely over the precordium. The abdomen was markedly distended with fluid. The liver was enlarged several fingers' breadth below the costal margin, the edge being sharp and firm. The lower extremities showed slight edema. The Wassermann reaction was strongly positive. The blood count was within normal limits, as was also the blood chemistry. Urine examinations showed a trace of albumen, and hyaline and granular casts. The phenolsulphonphthalein test was 75 per cent in two hours., Roentgenogram of the chest showed an enlarged heart. Several paracenteses had been done, as much as 3500 cc. of serous fluid having been removed on one occasion. The question for consideration was whether the enlarged liver was due to a syphilitic hepatitis or whether its enlargement was produced by chronic passive congestion due to the cardiac decompensation. The ascites seemed to be out of all proportion to the rest of the cardiac symptoms. Antiluetic therapy had been tried with apparently no effect upon the size of the liver. The mitral lesion, apparently a true organic mitral regurgitation, one of the most unusual of valve lesions, was present in spite of the absence of any etiologic factors in the past history. The conjecture as to the relationship of the syphilis and the mitral lesion was also raised.

The second case shown by Dr. Robbins was equally unusual. This was a case of mitral stenosis in a young negro male. He presented a presystolic thrill over the mitral area, and a presystolic mitral murmur. At intervals, a third heart sound had been heard. There was no evidence of nephritis. There was also a definite history of childhood "heart trouble", and the boy had been admitted only a few days after the left knee and ankle had been swollen and tender. The diagnosis of rheumatic mitral stenosis had been made.

Dr. Chaille Jamison discussed these cases, commenting upon the unusual opportunity offered the staff of seeing two such infrequent valvular lesions in the negro on one occasion. He stressed the traditional rarity of mitral valve lesions in the negro, and the uncommon occurrence of rheumatic fever in that race.

Several neurological patients were then shown by Dr. Henry Daspit. First, two white brothers, aged 7 and 11 years, who were mentally defective and were pellagrins. He presented them to consider the relationship between mental deficiency and pellagra, and because of the dietetic and familial histories. Both of these boys developed pellagra at the age of 13 months, after being weaned, and had had pellagra every spring since. This occurred in spite of the fact that they lived on a truck farm and had received a very full, well balanced diet. Neither of these children had developed mentally beyond the age of 3 years. Their father had had pellagra, as had also several relatives. There had been eight children. Two children had died of pellagra at about the age of three years, one child was a deaf mute, one child had died of birth trauma due to forceps delivery and two other children were normal. Dr. Daspit discussed the suggested predisposition of psychotic individuals to develop pellagra especially under institutional care. He also raised the question as to whether the early pellagra had been in any way responsible for the mental retardation, and whether there might not be some common hereditary metabolic deficiency responsible for both the pellagra and the mental retardation; especially in view of the unusual family history. Dr. Love, in discussing the cases, offered his opinion that diet was of very little importance in the etiology of pellagra, and was certainly in his experience not the sole factor. He quoted some investigative work which had suggested the frequency of pellagra in regions where there was fresh running water and sand. These authors had also nominated the sand fly as an intermediary host. At least 50 per cent of the cases coming under Dr. Love's observation had been from such regions, and all knew what a sand fly was and had been bitten by it on many occasions. Dr. Jamison agreed with Dr. Love's observations and stated that he too thought pellagra endemic, with the occurrence of epidemics precipitated by unknown factors.

The next case shown by Dr. Daspit was a white male, aged 50 years, who had been admitted to the hospital because of weakness of his gait, paresthesias, vomiting, sore mouth and diarrhea. Four weeks prior to his admission he had been suddenly chilled and exposed and had developed a quadriplegia with definite polyneuritis. He was considered to be a case of multiple neuritis without cranial involvement, probably beri-beri. His past history was irrelevant, and there was no history of alcoholism, lead or arsenic poisoning. He had, however, been on quite an inadequate, unbalanced diet. Blood and spinal fluid Wassermann reactions were negative, as were also all agglutination tests. There was no clinical evidence of myocardial involvement except for slight dyspnea following prolonged talking. There was no edema. The electrocardiogram showed no evidence of myocardial diseases. The gastric analysis showed free H Cl 26, total

acid 55. There was a slight secondary anemia. He had been absolutely bed ridden, unable to feed himself or even turn over. The diagnosis of beri-beri of the dry type seemed well established. Dr. Turner stated that Kieffer's work tended to show that the controlling factor as to whether beri-beri was to be of the wet or dry type, i. e. whether or not there was heart failure present, was the presence or absence of a disabling neuritis. When the neuritis disabled the individual there was no evidence of cardiac decompensation, therefore the dry type, because of the rest. Their work showed definitely however, that there was evidence of heart damage in both instances. Dr. Cazanavette complimented Dr. Daspit upon the interesting presentation.

Another patient shown by Dr. Daspit was a white male, 41 years of age, who had been admitted to the Charity Hospital complaining of a dull aching pain in the epigastrium which had begun about 5 or 6 weeks previous. This pain had lasted for about three days and had recurred about one week later and lasted until his admittance. This pain usually appeared about 30 minutes after eating and lasted for about two hours. Through this interval he also complained of vomiting after meals and the patient had lost approximately 25 pounds during the previous month.

The past history showed that he had had a penile sore 14 years previously, and four attacks of gonorrhea, the last attack about 14 years ago. His spinal fluid gave a strongly positive Wassermann, also a luetic curve though the blood Wassermann was negative. Gastric analysis showed free H Cl O, total acid 10. His urine showed no abnormalities. This patient was considered from a neurological standpoint for the possible diagnosis of gastric crises. His pupils reacted sluggishly to light, there was no Romberg, and knee jerks were present. Gastro-intestinal series showed a definite pre-pyloric filling defect. Dr. Daspit's opinion was that this individual had not had gastric crises but that his symptoms were probably due to organic gastric pathology. He raised the question as to the possibility of this being syphilis of the stomach. The problem was whether this individual should have rigorous antiluetic therapy or an exploratory laparotomy. Dr. Turned mentioned the fact that while potassium iodide by mouth will prove irritating to gastric ulcer, it usually relieves the symptoms in gumma of the stomach. He suggested the possibility of the use of the drug as a test in the diagnosis of syphilis of the stomach. Dr. Barton spoke on his experience in the use of potassium iodide and stated that this patient had received the drug without any ill effects. He thought this patient should have an exploratory laparotomy. Dr. Fenno however, suggested antiluetic therapy first, surgery being reserved after this procedure failed to produce beneficial results.

Dr. Jamison showed a 16 year old colored male who had been born in Charity Hospital. This was his fourth admission to the hospital. His birth had been a normal one. In 1923 he returned with a complaint of not being able to breath well and his tonsil and adenoids were removed. At that time the pre-operative examination showed no evidence of a cardiac disease. On this admittance he gave a history of previous good health but had been having difficulty for the previous four months at which time he had nearly drowned. Since that time he had been complaining of dyspnea, exhaustion and a chronic cough. He showed a cyanosis of the nail beds and the mucous membranes of the mouth. His heart showed some enlargement, especially to the right. There was a loud persistent systolic murmur over the second and third intercostal spaces on the left. The pulmonic second sound was accentuated. There was no anemia, polycythemia or clubbing of the fingers. The suggested diagnosis was pulmonary stenosis, probably congenital. Electrocardogram showed an extreme right ventricular predominance, $T^3 \pm P^3$ inverted. Blood culture had been negative, also the blood Wassermann. Because of a slight fever bacterial endocarditis had been considered. Roentgenogram showed an enlarged cardiac shadow, and a suggestion of some enlargement of the right heart. Dr. Jamison stated that while this case lacked many of the typical signs of pulmonary stenosis he thought that this diagnosis was the most probable one. Dr. Ashman discussed the electrocardiogram, stating that the normal P waves of the tracing favored the diagnosis of pulmonary stenosis rather than mitral stenosis, even though the electrocardiographic findings were compatible with both conditions. Dr. Hull discussed the mechanism of production of cyanosis. Dr. Cannon described a case with patent foramen ovale which had lived for 40 years and had died an accidental death. Dr. de la Houssaye stated that there are many cases of congenital heart disease occurring without cyanosis. Dr. Jamison stated that it was usual for two or more cardiac anomalies to appear together. Also, that a patent foramen ovale was not very serious and caused little cardiac embarrassment.

Following the presentation of these cases the Secretary read resumes of the clinical and autopsy finds in two cases. One was a case of pernicious anemia, the other probably acute yellow atrophy of the liver.

A motion was then made and seconded that the next meeting of the Section be dispensed with, after which the meeting adjourned.

Willard R. Wirth, M. D.

HOTEL DIEU.

The Hotel Dieu Staff met on March 21, 1932, with thirty-five members present. The meeting was called to order by the President, Dr. Joseph A. Danna, with the Secretary, Dr. Julius E. Isaacson, at the desk.

As the first feature of the scientific program, Dr. J. W. Cirino presented a case of pneumothorax associated with pyothorax in a girl baby aged eight months, which began with whooping cough. The child has been hospitalized since December, 1931, the temperature falling after each aspiration and then rising again. Although the child was at the time still in the hospital, there was a good deal of improvement shown. It was intended to clear up a possible lesion in the kidney and in the pleura. Drs. John Signorelli and Joseph A. Danna were associated in this case. Dr. Danna twice aspirated when the temperature had risen, indicating pus, but the second time he could find no fluid, although the needle touched the bottom of the cavity. He believes there is another condition present. Dr. Signorelli explained that the long duration of the illness had produced pathology in the pleura itself, and that the urine showed many cells, particularly hyaline. He laid stress on the extreme youth of the patient and the fact that here a pyothorax is associated with the pneumothorax.

Dr. Louis Levy described his method of treating pyothorax by inserting, through a small incision in the pleura, a tube packed tightly with gauze to keep air out of the cavity.

Drs. Joseph A. Danna and Lucien Fortier presented a case of giant cell sarcoma of the upper end of the fibula (non-malignant). Surgery, which ordinarily is entirely safe and simple for non-recurring, non-metastasizing sarcoma, was not resorted to because of the danger of injury to the peroneal nerve supplying the extensor muscles. The patient was receiving radiation treatment, and the tumor was expected to shrink so that it might be removed surgically, if necessary, without danger. Dr. A. Anderson discussed the possibility of surgery without injury to the nerve, by approaching it from above and drawing it to one side while the tumor was removed, this being the procedure intended by Dr. Danna.

Dr. S. Chaille Jamison presented a paper on aortic regurgitation, touching its history, its causes, its distinguishing marks, treatment (preventive and otherwise), incidence and prognosis. Dr. R. S. Unsworth inquired as to the effect on a patient with aortic regurgitation of the extreme repeated heat used in the treatment of late syphilis. Dr. A. de la Houssaye told of the experience of Dr. John L. Moss who followed up, after thirty years, several cases of heart disease originally treated in childhood. In conjunction with the angina phase, Dr. Maurice Couret stated he believes angina to be a nervous phenomena rather than acute pathology in the heart muscle. He cited the fact that in taking blood for Wassermann, the white man (known to be most susceptible to angina) will faint most often, and the black man (least susceptible to angina) will faint least often. Dr. J. A. Danna expressed a desire to hear more about the pericardial side of syphilitic "carditis." Dr. Jamison closed the discussion by describing the symptoms of heart failure.

The effect of pyretotherapy on patients with aortic regurgitation, he stated, was no different in the treated and in the untreated cases. As to angina, he explained that obliteration occurs almost always in the first few mms. of the course of the coronary artery as it passes through the walls of the aorta. The process advances downward and if the coronary arteries are slowly closed, thrombosis takes place; but the attack of angina does not occur providing the closure is slow. Pericarditis, he said, is not known except in rheumatic heart disease. Obliterative forms may be helped, but the obliteration takes place in early childhood and the patients are not likely to survive. Electrocardiography has been of great negative value and has helped in study, but its practical value is almost nil.

An Executive Session followed the scientific meeting.

TOURO INFIRMARY STAFF MEETING.

The regular clinical meeting of the Medical Staff of Touro Infirmary was held Wednesday, April 13, 1932, with Dr. Urban Maes presiding.

Drs. Saiewitz and Hava presented a case of multiple fractures of the mandible. The patient, a white female, was first seen September 22, 1932, following an automobile accident two days previously. At that time she was very ill, her face was swollen over the left side extending down into the neck, due to a cellulitis. Her temperature was 102.2°. She was dehydrated and her urine showed a 3 plus acetone reaction. A roentgenogram made the following day showed a fracture of the mandible in the ascending ramus on the right, the condyle being broken off, and the fracture line entering the sigmoid noche. There was also a fracture approximately at the symphysis menti and a third fracture on the left side just posterior to the posterior molar. There was considerable displacement of the fracture. The fracture on the left side and at the symphysis were comminuted and communicated with the mouth cavity. Both were infected. On September 22, under a general anesthetic, the third left lower molar was extracted as it had been broken off. A plaster boot was put on each foot for fractures here. The next day, under another anesthetic, wiring ligatures were used on the right and left upper and lower first molars and second bicuspids. The wiring was crossed. The

oral sepsis and infection was treated with irrigations of saline and hydrogen peroxide. Further examination showed that all the teeth were vital. On October 10, the temporary wiring was replaced by permanent wiring. On October 13, Dr. Hava decided that better apposition might be secured and the old wiring was removed and replaced by intermaxillary wiring, with the addition of one layer of an Esmarck bandage to produce pressure at the site of the fracture. There followed an interval with discharge of pus into the mouth on the left side and a discharge of several small sequestrae through the mouth. From November 17 through November 25 Dr. Hava began to loosen the wires and then removed them. Improvement had been continuous since and the patient was able to move her jaw and chew soft foot. No attempt was made to reduce the fracture of the ascending ramus on the right side. It was decided to leave the fracture as it was and to do what was necessary at a later day.

Dr. B. Efron discussed four cases of contact dermatitis. These four cases had allergic skin manifestations due respectively to flannelette, cotton, wheat, and a certain weed. The individual sensitive to flannelette had a dermatitis due to the wearing of flannelette pajamas. A small piece of flannelette placed against the boy's skin produced an eruption locally similar to the one over his body. This case was treated by substituting silk pajamas for the flannelette ones with complete relief. The individual sensitive to cotton reacted in a similar manner to the cotton from a blanket which was used. The third individual had had swelling of the upper lip and gums which was apparently due to the ingestion of wheat in any form. Elimination of wheat from his diet relieved him entirely of any further angio-neurotic manifestations. The fourth individual was subject to a general dermatitis which was found by tests to be due to a certain species of weed common in the location of his work. A small portion of this weed applied to an area on his back produced an extreme reaction similar in every respect to that which occurred over the rest of his body. An attempt was made to determine whether it was the stalk, leaves or pollen of the weed responsible for the reaction, but application of each produced approximately similar results. This patient was advised to avoid contact with the particular weed by protective coverings of the exposed portions of his body.

A case of spontaneous supracervical amputation of the uterus during labor was then presented by Dr. A. Jacobs. The individual had had several abortions and one normal delivery of a child weighing nine pounds. After being in labor for a considerable length of time with very strong frequent uterine contractions it was found that the dilatation of the cervix was proceeding very slowly, if at all. After an interval of rest with morphine strong uterine contractions continued to produce no further cervical dilatation, the cervix being thick, rigid, and not dilated. A cesarean section was decided upon and done. At the time of the section the patient's pulse was 80 and regular. The urinary contractions were forceful. Upon opening the abdomen in the low section a trickle of blood was observed and proceeding further the baby and the placenta were found free in the abdomen. The uterus was strongly contracted and had been almost completely amputated from the cervix. The uterus was removed and a live baby secured. Both the patient and the baby made an uneventful recovery. Dr. Jacobs stated that the frequent curettages might have caused a uterine perforation at some time with resulting scar tissue formation and weakening, which may have been responsible for the amputation. Upon examination of the specimen Dr. Lanford had failed to find any such evidence, however. Dr. Jeff Miller, in discussing the case, stated that he did not recall any such case in the literature. He stated that the case was unusual because there had been no cessation of pains. He emphasized the fact that the cessation of pains was not as important a symptom of uterine rupture as the text-books on the subject would lead one to believe. He stated that rupture of the uterus rarely occurred after myomectomies or perforations. Cessation of uterine contractions are more common in rupture of the fundus of the uterus than of any other portion. Dr. Walter Levy mentioned the frequency of the occurrence of uterine rupture at the site of Bandl's ring and reiterated the value of the use of adrenalin to relieve the occurrence of Bandl's ring as so often emphasized by Dr. Caire, especially prior to the performance of version and extraction.

Dr. Arthur Caire, Jr., then presented a case of an unusual complication of labor. A white female, aged 27 years, was first seen December 18, 1931; at that time about seven months pregnant. Her physical examinations was negative and up until that time her pregnancy had been uneventful. This was her first pregnancy, having been married slightly over one year. The pelvic measurements were I. S. 22 cm., I. C. 29 cm., I. T., 35 cm., external conjugate 20 cm. Vaginal examination revealed the markedly contracted outlet of a typical funnel type pelvis. At that time a note was made that a cesarean section would probably be needed. The laboratory examinations were within normal limits. On February 27, the patient's membranes ruptured spontaneously and she came to the hospital and was admitted, but she was not in labor. About 5 A. M., February 28, she awakened in labor. About 11 A. M., examinations revealed the cervix two fingers dilated, with a R. O. P. presentation.

A cesarean section was scheduled and performed at 3 P. M. The baby, weighing 9 lb., 14 oz., had evidently been somewhat embarrassed and required strenuous efforts at resuscitation. The patient left the table in good condition. Within 12 hours after the operation the patient's temperature was 104 degrees, with a pulse rate of 140, and respiration of 44. The chest showed no physical signs of pulmonary involvement upon examination. Upon March 1, the abdomen began to become distended in spite of the fact that a duodenal tube had been inserted at operation and gastric lavage had been done frequently since. There was still no signs in the chest. On March 2 the medical consultant found evidence of bronchial pneumonia especially marked on the right side. Temperature fell to a range of 101° to 102°, with respiration from 20 to 30. On the next day, March 4, the patient seemed about the same except for the past 24 hours she had been complaining of great pain in the right anterior chest near the costal margin. A chest plate was made at that time. This roentgenogram showed evidence of a pneumonic process or consolidation at the base of the right lung. There were rales on both sides of the chest, especially posteriorly at the bases. The medical consultant suggested the possibility of multiple infarcts of the lungs at this time. The patient continued complaining of pain on the right side in the axillary line, over the 8-9-10 ribs. There was dullness over this area. On March 5, the patient complained of being very uncomfortable with a marked increase of pain in the chest. The temperature was 99°, pulse 160, respiration 42, blood pressure 105-75. She seemed to be in shock. The pulse were irregular. This lasted for about an hour and the patient seemed to be entirely relieved, and ate a good supper. Several hours later the medical consultant found, for the first time, a systolic murmur at the mitral area, and a diagnosis of endocarditis was made. About three hours later on the same day the patient moved her position, and as she was being helped to move she suddenly threw back her head and a convulsive spasm involving the head and neck muscles and the right arm was noticed which lasted for two minutes, after which she died. When Dr. Caire saw the patient shortly after her death there was still definite spasm and rigidity of the neck, face and right arm. The case was not autopsied, therefore the conclusions were based entirely upon clinical observations. The diagnosis made was multiple pulmonary infarcts, septic endocarditis and cerebral embolism, the later being fatal. Dr. Caire stated that thrombosis and embolism are quite rare conditions. In a series of 5,734 deliveries by Dr. Polak, there were 12 cases of embolism and 30 cases of thrombosis. Five cases of the 12 cases of embolism died, while 2 cases of the 30 cases of thrombosis died. These figures show that thrombosis occurs must often in obstetrical cases than embolism. Dr. Tyrone, in discussing the case, commented upon the frequency with which gastric and abdominal distention is observed following the delivery of large babies. He thought this probably due to an ileus. Dr. Matas spoke at length on embolism and thrombosis as results of obstetrical and gynecological operations.

A demonstration of the function of the patella, with suggestions for operation after fracture was presented by Dr. E. Denegre Martin. By a number of diagrams on the black board and the use of a very clever model of the knee joint, Dr. Martin clearly showed the function of the patella, and the mechanism of its fracture. He then discussed his recommended open operation with the wiring of the fracture with annealed iron wire. This premitted the patient to be back on his feet again in two weeks. Lantern slides of roentgenograms of cases in which the wire had been allowed to remain permanently in place were shown. Dr. Matas and Dr. Rosen discussed the procedure.

Following this scientific section a copy of the resolutions adopted upon the death of Dr. J. Burney Guthrie was read. The resolutions eulogized the late Dr. Guthrie who had been a very active member of the staff for many years.

Willard R. Wirth, M. D.

VICKSBURG SANITARIUM AND CRAWFORD STREET HOSPITAL.

The regular monthly meeting of the staff of the Vicksburg Sanitarium and Crawford Street Hospital was held on Monday, April 18, at 6:30 p. m. After the business of the staff and reports from the records department and analysis of the work of the hospital, special case reports were made as follows:

1. Transurethral (Cystoscopic) Prostatic Resection (Report of Nine Operations).—Dr. A. Street.

Until recently, male patients suffering from urinary obstruction the result of enlarged prostate had the choice of either suprapubic or perineal prostectomy, or a life of "catheterism." If the obstruction was from a small fibrous or median bar it was relieved satisfactory by some type of punch operation, usually the Young punch, or the Caulk cautery punch.

In dealing with patients who can be classed as good surgical risks, prostatectomy has seemed entirely satisfactory. However, we are occasionally confronted by a patient with an enlarged obstructing prostate who is such a bad risk that suprapubic or perineal prostatectomy is definitely contraindicated, or can be done with only slight hope of his surviving the operation.

In the fall of 1931 my attention was called to recent advances in transurethral surgical pro-

cedures in the region of the neck of the bladder by the papers of Dr. Joseph McCarthy of New York and of Dr. Davis of Charlotte, North Carolina. The improvement centers about development of high frequency cutting current sufficiently powerful to cut easily in water. Operative cystoscopic equipment had been available especially since Maximilian Stern perfected his resectoscope, which is a cystoscope provided with a loop electrode for cutting tissue within the bladder or urethra with the high frequency cutting current. Dr. McCarthy has adapted a modification of his foroblique panendoscope to this work. In my cases I am using the McCarthy panendoscope, and for generating the cutting current, the McCarthy surgical unit which was developed by Mr. Wappler.

In the past three months I have removed the obstructing portion of the prostate by this cystoscopic method in six cases. Four of the cases were small prostates with middle lobe or median bar obstruction. Two cases were very large so-called adenomatous enlargements. The relief of obstruction has been complete in all of these cases, and just as much so in the cases with very large glands as those with the small ones. In five of the cases post operative period was entirely uneventful. One case suffered considerably from tenesmus in the post-operative period and for some reason would not tolerate the indwelling urethral catheter. I think some of this difficulty was due to poor cooperation on the part of the patient. On this case a perineal cystotomy was done, leaving a large tube drain, for one week. The patient had no further trouble, the fistula was healed in three weeks, and he is urinating normally. One case on admission was completely obstructed and had neglected to have his bladder emptied by catheter often enough to prevent serious damage. He showed extensive general edema, prostration, mental confusion, and nitrogen retention. He was prepared for operation in exactly the same manner as for the usual types of prostatectomy. Catheter was left in the bladder through the urethra for two weeks. By this time the edema had subsided and the patient appeared normal. Analysis showed blood urea normal. Rectal and cystoscopic examination showed a very large prostate which was resected by transurethral method, and followed by uneventful convalesence. The details of this case are cited to emphasize the fact that the treatment of patients with prostatic urinary obstruction and its serious complications does not always resolve itself into a simple procedure, without preliminary preparation and followed by a hospital stay of a week or less. It depends on the problems presented by each individual patient. Some of them can have a small prostatic obstruction resected without preparation and can be discharged from the hospital after five days.

While the number of cases in this report is too small and the time since operation too short to afford conclusive evidence as to permanent results, the results thus far as satisfactory, are very encouraging and I think justify some enthusiasm. Dr. Davis reports good results in over five hundred cases. Dr. McCarthy reports excellent results, and is so enthusiastic as to predict that the old operation of prostatectomy may become obsolete. In a recent conversation with Dr. Virgil Counseller of the Mayo Clinic, he stated that forty per cent of prostatic obstruction cases at the clinic are being treated by transurethral resection. The method is being used widely, and in the course of time its indications and contraindications will be established. It may or may not entirely replace suprapubic and perineal prostatectomy.

2. Conservative Treatment of Traumatic Injuries of the Hand.—Dr. J. A. K. Birchett, Jr.

Abstract: Patient—Colored, male, aged 27, married, laborer in compress.

Chief Complaint.—Crushed hand.

History of Chief Complaint.—On January 5 of this year while attempting to tie a bale of compressed cotton, hand was caught between bale and press. Acute pain caused him to cry out for the engineer to let the pressure off the press. Instead of doing this the engineer applied more pressure which caused an extensive crushing wound of his left hand.

Past History.—No previous serious illnesses; no operations; general health has been good. Denies any venereal infection.

Family History.—Father and mother living and well; no tuberculosis or cancer in family. Two brothers and three sisters living well.

Physical Examination.—Young negro male brought into hospital with evidence of moderate shock because of severe crushing of left hand, occurring approximately four hours before. Had received first aid at time of injury. Dressing was saturated with blood. Soft parts had been stripped from the metacarpals and phalanges and there were comminuted fractures of all metacarpals with laceration of the tendons. It was evident that amputation above the wrist would possibly be necessary this depending upon the amount of impairment of blood supply.

Circulatory system was normal except for increase of heart rate due to loss of blood volume. There was no evidence of any respiratory infection.

Procedure.—Under a general anesthetic for complete relaxation and to enable detailed examination of the hand, it was deemed advisable to try to save the first two digits of the thumb,

the distal phalanx having been torn from its articulation and forced into the soft tissues of the palm. The little finger was the least injured, the skin being stripped from its surface. The ring finger was fractured in two places and disarticulated from the wrist. It was replaced in normal position and splinted with the little finger after all tabs and fragments of tissue and bone had been removed. The suturing was done with silk worm. The tension was not made abnormally tight to allow for secondary swelling. Two tube drains were placed in the reconstructed palm to take care of any purulent accumulation.

Progress.—We were pleased with the progress of this wound. Very little infection occurred and in ten days healthy granulation tissue was developing. There appeared to be a sequestrum forming in the middle portion of the fourth metacarpal as there was profuse drainage of thick purulent material from this region. A necrotic piece of bone was removed with subsequent clearing up of the discharge. In four weeks we were able to apply our first graft to the graulating surface. At this time one-half of the hand was covered, beginning on the thumb side. All of these grafts were successful. Two weeks later Dr. Walter Johnston grafted the remaining raw surface and had splendid results, all grafts taking. Patient was discharged nine weeks after admission with a much better result than was first expected. Some motion of the thumb and little finger is possible and though the extensor of the ring finger sloughed during the process of suppuration. this may be replaced by a tendon transplant later. We feel that by being conservative in this case, we have saved a portion of the hand that will be of economic use in later life whereas if we had been too hasty in our early observations and amputated, our present result would have been defeated.

3. Hyperplastic Tuberculosis of the Small Intestine—Two Cases in Children.—Dr. G. C. Jarratt.

Abstract: Patient, white, female, aged 7 years; admitted to hospital March 9, 1932.

Chief Complaint.—Pain in abdomen; fever; nausea and vomiting.

History of Present Illness.—Mother stated that child awoke this morning at 4 o'clock complaining of pain in right lower abdomen. Pain continued; enema given without relief. At 9 A. M. another enema was given followed by a normal stool. Child vomited after enema. On way to hospital complained of pain with least bumping of car. Fever 99.4° F. since onset. No loose stools; no indiscretion of diet. Child had felt well and appeared in excellent health up to onset of symptoms. Mother stated that child had had pain in abdomen transiently for past three or four years.

Past History.—Pertussis a two years; chicken pox one year ago; no other contagion. Toxin-antitoxin mixture followed by positive Schick test; two doses of toxoid with negative Schick test. Vaccinated against smallpox with negative results. Tonsils and adenoids removed at three years of age. No other illnesses except colds and otitis media. Milk supply has never been from tuberculin tested cows.

Family History.—Mother and father living and well; one miscarriage at five months; one other infant 18 months af age living and well. No tuberculosis contact.

Physical Examination.—Temp. 100.4° F.; pulse 120; weight 50½ pounds. Well developed and nourished; not very acutely ill. Nose showed mark redness and swelling with muco-purulent material in right side especially. Teeth had many fillings. Slight tenderness over lower abdomen; not more marked on right than on left. Examination otherwise not remarkable.

Laboratory.—Blood: Leukocytes 29,300; small lymphocytes, 15%, large lymphocytes, 3, large mononuclears, 1, polymorph, neutrophiles, 81; erythrocytes 5,050,000; Hb. 72%; no malaria found. Urine: Negative except for rare fresh red blood cell.

Course and Treatment.—Child put to bed for observation. Soda enema with passage of flatus and small soft stool. Roentgen ray revealed cloudy right antrum; chest negative. Two hours later child began to have pain in lower abdomen and vomited once. Leukocytes 30,600; small lymphocytes, 22%, large lymphocytes, 3, monocytes 1.5, polymorth. neutrophiles 73.5. An exploratory operation was decided upon with an acute appendix in mind.

Operative Report.—McBurney incision. Appendiceal serosa shows acute inflammatory. Much amber fluid in peritoneal cavity; viscera generally reddened. A mass at pelvic brim, located in the wall of small intestine and adjoining mesenteric attachment, indurated. No distention of any portion of intestine. Lymph nodes of mesentery show enlargement, size of buck shot. Appendix removed. Mass returned; abdomen closed without drainage.

Postoperative Diagnosis: Appendicitis, acute; mesenteric lymphadenitis, acute; hyperplastic tuberculosis of intestine.

The mass was not resected because of acute inflamation of peritoneal contents, no obstruction was caused by the mass, and past experience has taught that such lesions apparently heal with no bad results if there be no obstruction, under general treatment for tuberculosis.

For several days child had occasional vomiting spells and was given daily intravenous glucose solution. On third day, there was no vomiting, temperature was normal; blood count and urine

were normal. Mantoux test 1-1000 dilution was negative; 1-100 dilution markedly positive at end of 24 hours.

Pathological report of examination of appendix showed acute and chronic inflammatory. Feces examinations were negative except for occasional pus cells.

Child returned home on tenth day with instructions as to proper diet, especially eggs and milk. Cod liver oil and ultra-violet ray were prescribed. Treatment of sinus advised.

I have since seen the child. In one month she has gained two pounds in weight; there is no further pain in abdomen; stools are normal; and mother states that she seems in better health than for the past year. I have not been able to feel the mass either through abdominal wall or by rectal examination.

Patient.—White, male, age seven years, admitted to hospital October 22, 1929.

Chief Complaint.—Diarrhea; fever; nausea and vomiting; abdominal pain.

Present Illness.—Present attack began more than three weeks ago, with onset of diarrhea, fever, nausea and vomiting and abdominal pain. Was treated by family physician and has improved, but still has too many stools with much mucus; from five to ten times in 24 hours cries and at times screams with acute abdominal pain lasting from one to five minutes. Still has fever, not high; has more pain and more stools if diet is increased. Had been seen in out-patient clinic on October 11, and was given calomel, 1/10 grain, b. i. d., bismuth and belladona and lime water and soda enemas twice daily. Roentgen ray studies of the gastro-intestinal tract were negative except for visible appendix. Leukocyte count has persistently been above normal, 12,000 to 14,000, with 57 to 75 per cent polymorphonuclears. Urine negative.

Condition has greatly improved under treatment; was able to eat more with less pain and no more frequent or loose stools. Pain still present but intermittent; soreness and tenderness in right lower quadrant persist.

Past History.—No previous serious illnesses. One previous similar attack of diarrhea but much milder.

Family History.—Father, mother, and one sister living and well. No tuberculosis contact.

Physical Examination.—Temp. 98° F; pulse 100. Pale, under-nourished child; appearance of having recently lost weight. Tonsils enlarged; many carious teeth; many small, hard, freely movable nodes in neck. Abdomen shows muscular rigidity and persistent tenderness in right lower quadrant. Marked phimosis. Examination not otherwise remarkable.

Operation.—McBurney incision. Ileum and cecum delivered; appendix showed chronic inflammatory and was removed. The lower six or eight inches of ileum were thickened, red, edematous, and in mesentery overlying this portion were lymph nodes size of small peas to size of large marbles. Considerable amount of clear serous fluid in peritoneal cavity. Nodes extended along aorta as far as could be palpated. Impossible to deliver one of the nodes for diagnosis. Wound closed without drainage. Circumcison done.

Postoperative Diagnosis.—Chronic appendicitis; hyperlastic tuberculosis of intestines; phimosis.

Convalescence was uneventful. Discharged with instructions as to diet, cod liver oil, and sunshine.

Three minute reports of the literature of the month were given by Drs. G. M. Street, A. Street, L. S. Lippincott, J. A. K. Birchett, Jr., L. J. Clark, and G. C. Jarratt.

The meeting closed with a lunch.

Leon S. Lippincott,
Secretary.

STAFF MEETING, VICKSBURG HOSPITAL AND CLINIC, APRIL 7, 1932.

Abstract: Post-influenzal pleural effusion in patient with rheumatic heart disease and syphilis. —Dr. W. G. Weston.

Patient.—B. P., colored, female, married, aged 35, housewife.

Chief Complaint.—Shortness of breath and pain in the right upper quadrant of the abdomen.

Present Illness.—Onset two months ago at which time patient had influenza. Onset with a chill followed by fever. Following this several chilly sensations, but no actual chills. Productive cough, patient coughing up muco-puruent sputum which at times was blood tinged, also complained of generalized aching all over the body and in the joints. Was in bed for two weeks and since that time has failed to gain strength and has felt tired and weak. Has noticed gradual increase in shortness of breath. At the time of admission of hospital patient was compelled to sit up in bed especially at night in order to get breath.

Since onset of present condition has complained of extreme nervousness, being easily excited and also having palpitation of the heart with excitement.

Family History.—Negative.

Respiration; See present illness. Circulation, See above, no edema of the extremities. Palpitation and dyspnea as mentioned above. No precordial pain. G. I. negative. Genito urinary, negative.

Marital: Duration first time two years. Duration second time ten months. One child living

and well. Three dead, all stillbirths. Aborted at 4 months; 5 months and 4 months.

Past History.—Measles during childhood, Typhoid fever at age of 14. No history of malaria. Pneumonia in childhood. Influenza at onset of present illness. None previous.

No history of operations and no history of serious illness.

Menstrual.—Onset at 16. Periods have been more or less irregular. Duration three days. Frequently misses a period. No history of dysmenorrhea. Flooding at times particularly after menstruation has been resumed following an abortion. Some passage of clots. Denies discharge associated with periods or between periods.

Physical Examination.—Height 65 inches. Weight 145 pounds. Temperature on admission 98° F. Pulse 90. Respiration 35. Inspection reveals fairly well developed and nourished female colored adult. Not appearing acutely ill, however, patient is rather markedly dyspneic. Sitting up in bed trying to get breath. Patient appears quite restless and excited. Head of normal size and contour. No areas of tenderness, no bulging or depression noted. Eyes: Pupils are equal and regular. React to light and accommodation. Following dilation of pupils with homatropine, examination of the eye ground reveals some tortuosity of the vessels. Slight nicking of the vessels, so called arterial venous nicking. The discs are clearly outlined and present no abnormality. No evidence of hemorrhage into the retina and no evidence of albuminuric retinitis. Ears: No tenderness, tophi or discharge present. Nose: Mucous membranes are red and somewhat injected. There was no deviation nor perforation of the septum. No chronic discharge. Mouth: Dental caries and pyorrhea present. Tonsils are submerged, cryptic and do not appear to be definitely diseased. Neck: There is rather marked prominence, tortuosity and fullness of the veins of the neck bilaterally, also visible pulsation in the neck. Thyroid gland does not appear to be enlarged. It is not nodular. No bruits. Trachea seems to be in the midline and there is no tracheal tug present. Chest: Size and contour of chest normal. Breasts are pendulous. No masses felt in either breast. No retraction of the nipples and no discharge from the nipples. Lungs: Expansion is definitely and rather markedly limited on the right side. Palpation: Tactile fremitus is somewhat increased in the upper portion of the right chest gradually decreasing until there is total absence of tactile fremitus below the inferior angle of the scapula on the right. There is also diminished tactile fremitus in the left base posteriorly. Auscultation: Exaggerated broncho-vesicular breathing in the right upper chest, also in the left. Diminution in the breath sounds right chest from inferior angle of the scapula down. In the base there is complete absence of the breath sounds, also marked diminution in the extreme left base. Vocal fremitus is also absent over the right base. It is diminished over the left. Flat note from the inferior angle of the scapula downward, right side, posteriorly. The note is absolutely dull or flat. Marked increase in resistance to percussion over this area. Percussion on the left reveals dull note at the extreme left base. Auscultation: Few crepitant rales at both bases which clear up on deep breathing. Heart: Apex beat is seen in sixth interspace 14 c. m. from midsternal line. Palpation: Apex beat felt in sixth interspace, 15 c. m. from the midsternal line. It is forceful in character. No thrills felt. There is definite impulse felt over the precordium. Some movement of the overlaying structures with each heart beat. There is considerable enlargement of the heart to the left. The measurements are as follows: Second interspace, 5 cm.; third interspace 7 cm.; fourth, 9 cm.; fifth, 11 cm., and sixth, 14 cm., from midsternal line. Whether this is due to actual enlargement or whether the heart is displaced by the presence of fluid in the right pleural cavity it is difficult to say. The rhythm at the time of admission was regular, interrupted by frequent premature contractions. Heart sounds varying in intensity. There is a definite murmur at the apex, presystolic in type, crescendo in nature, not transmitted. Abdomen: Tenderness in the right upper quadrant on pressure. Liver seems to be slightly enlarged and is definitely tender extending below the costal margin. There is also tenderness in the epigastrium. Kidney and spleen are not palpable. No other masses felt in the abdomen. No rigidity. Genitalia: Orifice normal. No evidence of bartholinitis. Cervic has stallate lacerations; rather hard. The adenexa revealed no tenderness or masses. Uterus appeared to be somewhat larger than normal. Rectal: No external hemorrhoids. Sphicteric tone is good. No masses flet per rectum. Examination of the extremities reveales no edema or evidence of recent edema. Reflexes are active.

Progress Notes: February 24, 1932. Ophthalmoscopic examination reveals no blurring or choking of the discs. There is no evidence of retinitis or hemorrhage into the retina. The right chest was aspirated yesterday by Dr. W. H. Parsons in the 7th interspace, midscapular line and 39 ounces of cloudy straw colored fluid were obtained. Specific Gravity 1.010. A specimen of the fluid was sent to the laboratory for examination for albumin, cell count, culture and ex-

amination of primary smear. Patient obtained considerable relief from aspiration. Dyspnea is less marked. The fluid intake and output do not show any marked variation, but appear about equal. Other laboratory as follows: Urea Nitrogen 11.2 mg per 100 cc.; Creatinine 1.4 mg per 100 cc. Blood: Red blood count 4,070,000. Hemoglobin 72% Tallqvist. White blood count 6,400; polymorphonuclears 71% (10 band forms). Color index 0.80. Urine: Albumin—1/60 of 1%. Microscopic: Rare hyaline casts. Numerous epithelial cells, few pus cells and numerous leukocytes; some bacilli. Specific gravity 1.028.

Blood Kline and Young: Diagnostic test—4 plus; exclusion test 4-plus. Kahn: 0.05 cc. 4-plus; 0.025 cc. 4-plus; 0.0125 cc. 4-plus.

Final Diagnosis: 1. Post-influenzal pleural effusion right side. (2) (a) Rheumatic heart disease; (b) Cardiac hypertrophy, generalized; mitral stenosis (c) Regular rhythm; (d) Heart compensating at present. (3) Syphilis.

Patient placed on iodides and mercury inunctions and advised to return for observation.

Abstract.—Treatment of Extensive Burns with Special Reference to the Use of Tannic Acid—Case Report—Dr. W. E. Akin.

The literature pertaining to burns with particular reference to the pathology and treatment of extensive burns was reviewed in detail.

The statistics of Beckman with reference to the end result obtained in a series of 114 cases treated with tannic acid and 320 cases treated by other methods were reviewed and comments were made concerning the reduction of mortality from 28 per cent to 15 per cent, it being felt that this reduction was due to the use of tannic acid.

Attention was drawn to the deleterious effect upon the adrenal glands of the toxemia from extensive burns and it was suggested by the essayist that damage to these glands might parallel or exceed the damage to the kidneys.

Patient.— D. M., White, male, aged 39.

Family History.—Irrelevant. Personal History: irrelevant; past history irrelevant; Cardio-Resp. Not remarkable except for double pneumonia in 1924. G. I. negative; G. U. negative.

Chief Complaint.—Burns due to scalding water.

Present Illness.—Onset thirty minutes before admission. Patient at one of the local lumber mills, walked in front of a blow out valve just at the time when the engineer was blowing out the boiler. Scalding water under much pressure was sprayed over the entire body. At the time of the injury, the pain was intense and for five minutes the patient experienced a chilly sensation over the body and was in a semi-comatose condition. He was placed in a car and brought immediately to the hospital. Patient was in acute shock at this time.

Treatment and Progress Notes.—No immediate attempt was made to examine patient. He was undressed and placed in bed. Hot water bottles applied to the body and one-third grain of morphine given in an attempt to react the patient from the severe shock. External heat was then applied and the patient was made fairly comfortable.

Later examination.—Examination confined to inspection of the patient. Patient found to be a male white adult, well developed and well nourished. An anxious expression on the face. Patient still in acute shock. Temperature 96°. Pulse rapid, over 100 in number. Respiration shallow, 20 in number. There were burns covering two-thirds of the body. They ranged from first to third degree burns. The burns extended from the nape of the neck involving the entire back to the calves of the legs. The burns extended on the right arm and the lower one-third of the forearm anteriorly and posteriorly. On the left, the burns extended down to the hands. Minor burns about the hands. Anteriorly, the burns involved the left chest extending about three inches beyond the midline to the right. Both legs anteriorly were burned down to the knees. Scattered areas of first degree burns on the feet. Right chest and right thigh anteriorly being practically the only parts not involved with the exception of the face. Burns about the buttocks and in the left popliteal space was third degree in nature. Third degree burns under the left axilia and about the right elbow. On the back, the burns were first and second degrees. No further examination made at this time.

Patient now fully reacted. After one hour the devitalized skin was carefully removed and the burned areas sprayed every fifteen minutes with tannic acid solution (3 per cent). Patient had been placed on sterile sheets and a heat canopy placed over the body. Eight ounces of fluid offered to the patient each hour. Nurse instructed that the patient was to be made to drink at least eight ounces of fluid per hour for twenty-four hours. After twelve hours the body was covered with a black eschar. As fast as blebs were formed, devitalized skin was peeled away and the ereas sprayed with tannic acid. Fluids were forced. About 8000 cc. of fluids per day. Blood transfusions begun on the third day and continued almost daily. A total of fifteen transfusions being given in the first twenty-four days, 350 cc. of citrated blood being the usual amount given. The patient's progress was rather stormy. On the 10th day, there was evidence of pus formation. as exemplified by the extreme toxemia of the patient. The tannic acid was removed as it separated from the edges and S. T. 37 packs were constantly applied. On the 10th day digi-

talization of the patient was done due to the poor condition of the circulatory system. Dry heat in the form of the electric light placed under the canopy was constantly applied. Position changed as often as necessary so that the areas could be dried. S. T. 37 treatment continued and the general care of the patient maintained. Average fluid intake for the first twenty-four days was 9000 cc. Urinary output averaged 3000 cc. Urinalysis showed not over 1/60 of 1 per cent albumin. Sugar-content of the urine averaged from .3 per cent to .5 per cent. Blood chemistry remained normal. The patient recovered after forty-seven days of illness.

General Examination After Recovery.—Patient well developed but emaciated. Weight 122 pounds. Patient has lost forty pounds during the illness. Walks with a slight limp to the left. Eyes: Pupils are markedly dilated, otherwise negative. Nose and mouth negative. Ears and neck negative. Examination of the skin: The skin posteriorly over the areas described on first examination have completely healed over. There is a small area under the left axilla, left hip and left popliteal space which have not entirely healed. The chest is negative except for emaciation. Heart negative. Abdomen negative. Extremities are greatly emaciated. Considerable scarring of the right elbow. Some slight retraction. Extension and flexion, however, normal. There is marked scar formation and contraction in the left popiteal space, extension and flexion being only partial. Several healed boils scattered over the thighs and legs. Reflexes are hyperactive. The patient is highly nervous. There is a fine tremor present. Patient, however, was able to walk out of the clinic. Was advised to return to the clinic for dressing and check up.

Abstract.—Ureteral Transplantation in Children—Dr. R. C. Cutts.

A series of 60 cases of ureteral transplantation in children was reviewed. This material was studied while a member of the staff of the Mayo Clinic. The indications for surgery the most favorable time at which operation can be done and especially the pre-and post-operative care and complications were reviewed.

Report of the Department of Obstetrics for the year 1931—Dr. I. C. Knox.

A review was made of all cases occurring on this service during the past year. There was no maternal mortality and it was felt that the morbidity was satisfactorily low. Special comment was made relative to the induction of labor in those cases where such procedure was required. In a series of several labor induced by the use of the bag there was neither maternal or fetal mortality and there were no infections.

STAFF MEETING OF THE MISSISSIPPI STATE BAPTIST HOSPITAL, JACKSON, MISS.

ANNUAL MEETING.

The regular monthly meeting of the staff of the hospital was held at the hospital on Tuesday, April 5, 1932, and was attended by a good number of the staff. The meeting was started promptly at six-thirty o'clock with a wonderful dinner served by the hospital and very delightfully received by the members present. At the close of the dinner the President of the staff, Dr. Robin Harris called on the superintendent, Rev. Wayne Alliston, who discussed two very important questions, namely, the low cost of maintenance of the hospital with the largest number of patients in the house in twenty months and a new method of urging the staff members to complete unfinished histories in the chart room. This new method was suggested by Dr. H. R. Shands and adopted by the staff of the hospital. Mr. C. A. Palmerlee, director of laboratories, gave a summary of one hundred complete examinations in his department, which was a revelation to the staff in that this series showed a large percentage of tuberculosis, syphilis, and hook worm infestation in adults. Dr. W. B. Dobson followed this with a very interesting case report of a dermoid cyst in a three year old child, located in the glabella region with a fistula opening about two-thirds distance down the nose from which oily material and occasionally a hair was expressed on pressure of the tumor mass. Operation was done followed by a complete cure. Dr. A. E. Gordin followed this with a case report of a colored male on whom a car of acid phosphate had fallen, burning him severely and crushing three lumbar vertebrae. He was operated upon and the fragments removed and due to the acid burns he was unable to put him in a cast and so was put in traction on a frame. The vertebrae overlapped by one and a half vertebrae then, 1930. Now, two years later, the canal is S-shaped and the lumbar region is shortened by about three inches without paralysis or parasthenia then or now and no disability. The patient was present and the staff evidenced much satisfaction at the case and its outcome.

Immediately following this was the election of officers for the coming year. Dr. H. F. Garrison, the past Secretary, was elected President, Dr. D. W. Jones was elected Vice-President and Dr. Lawrence W. Long was elected Secretary.

Lawrence W. Long, Secretary.

MISSISSIPPI STATE HOSPITAL, FONDRON, MISS.

Obscure Cases of Paresis.—R. B. Zeller, M. D.

The diagnosis of paresis is, as a rule, largely

dependent upon the serological findings. Sometimes, however, we find the clinical picture without the positive serology as well as at times finding a serological case of paresis without the clinical findings.

Unfortunately, the vast majority of the cases of dementia paralytica that present themselves at a state hospital for treatment are so far advanced that the diagnosis is almost immediately obvious. The persistent headaches, change in speech, sluggishness of the pupil in reacting to light, difficulty in thinking or increased forgetfulness have not been early enough recognized by the general practitioner.

Few of us have the opportunity to watch a case of dementia paralytica develop from incipiency and note the gradual serological change.

Case Report: Case 1. Colored, male, farmer, aged 32 years. First admission to the Mississippi State Hospital was December, 1920. At that time he was going through a period of excitement. Neurological signs were absent. He proved a very difficult patient to hold and frequently discharged himself only to be returned several months or years later, and on and this account failed to receive sufficient treatment. The serologic findings and treatment were:

December 10, 1920: Blood Wassermann positive with both lipoid and cholesterinized antigens. Spinal fluid Wassermann negative; cell count normal. No colloidal gold curve.

December 14, 1921: Blood Wassermann positive with both antigens; Spinal fluid still negative. Neoarsphenamine, 6 intravenous injections of 0.6 grams each.

November 3, 1923: Blood Wassermann negative, Spinal fluid Wassermann negative, cell count normal, colloidal gold 1112200000.

June 25, 1928: Blood Wassermann negative, Spinal fluid Wassermann negative, cells 25, globulin plus, colloidal gold curve 5555430000.

At this time patient presented the symptoms of clinical paresis: speech defect memory impairment, sluggish pupils and disturbed reflexes.

Case 2.—Divorced, white, male, aged 43 years, auto salesman by occupation, admitted to the Mississippi State Hospital, February 15, 1929.

History of having been divorced at ages of 32 and 42. No history of venereal diseases. Seizures beginning a few weeks prior to his admission together with marked irritability, forgetfulness and pseudo-reminiscences occasioned his commitment.

Examination: Blood pressure 132/90, aortitis, contracted and unequal pupils, speech defect and memory impairment. Some ideas slightly grandiose in character were noted.

Serology: Blood Wassermann negative; spinal fluid Wassermann negative; globulin normal; no colloidal gold curve; cells 15.

Tentative Diagnosis: Dementia paralytica based on the spinal fluid cell increase, seizures beginning at the age of 43, pupillary disturbance, speech and memory impairment.

Course: 40 intravenous injections tryparsomide, 2 grams each at weekly intervals with potassium iodid and mercury by mouth concurrently.

On April 22, 1930, Blood Wassermann (Kolmer) 4-plus; spinal fluid Wassermann 4-plus; cells 18; globulin present, colloidal gold curve still normal.

Clinically the patient is greatly improved in spite of serology. Has had no seizures since the institution of treatment.

Case 3. White, male, aged 32 years, admitted to the Mississippi State Hospital July, 1929. Farmer by occupation. Committed to the hospital on account of hallucinosis associated with ideas of persecution.

On examination no neurological disturbance was noticed. Memory was good. Mentally patient was actively hallucinated, hearing the voice of the Lord frequently. Had pronounced ideas of persecution on the part of a certain neighbor that desired his farm. Blood Wassermann negative. Due to the fact that our technician was critically ill and his successor had not been chosen, routine spinal fluid examination was temporarily discontinued. A diagnosis of dementia praecox was made.

The patient failed to improve. Instead, his memory began to fail, his speech became halting, he lost weight. He presented symptoms of pellagra for which he was treated. He improved slightly in nutrition but continued to go down mentally. A complete recheck of the case was made.

August 29, 1930.—Blood Wassermann (Kolmer): 4-plus; Kahn 4-plus, Kline and Young 4-plus; spinal fluid Wassermann 4-plus; cells 36; globulin plus; colloidal gold 5555552000.

Case 4. Single, white, male, aged 27 years, farmer, admitted to the Mississippi State Hospital February 18, 1928.

Previous History.—Had previously been a patient in the hospital in 1921 at which time both blood and spinal fluid were negative and a diagnosis of psychosis with mental deficiency made.

Examination.—Aortitis, hearing impaired in the left ear, occipital headaches. Blood pressure 120/75. Mentally presented a marked fear reaction and thought that someone was trying to kill him.

Serological.—Blood Wassermann (Kolmer) 4-plus; spinal fluid Wassermann negative; cells 35, globulin plus; colloidal gold 5555540000.

Treatment.—This consisted of malaria, 25 intravenous injections of neo-arsphenamine and 12 intravenous injections of tryparsomide. Potassium iodid given by mouth in ascending doses until

patient was taking 130 grains daily at which time it was discontinued.

November 12, 1928. Blood Wassermann negative; spinal fluid Wassermann negative; no globulin increase; colloidal gold curve normal, cells 20.

Comment.—Many more similar cases might be given but these four will suffice. They all show the necessity of careful observation and routine serological reports. Case 2 shows that treatment should not be neglected even though the serology is negative. A negative history of syphilis is unreliable.

One must not be afraid to make a diagnosis of syphilis in the face of both negative history and negative Wassermanns. As treatment depends on the diagnosis and dementia paralytica progresses rapidly, this is important.

Case 1 is chiefly of interest as it shows the course of syphilis in a patient over a period of seven years during which no treatment worthy of note was given.

The last case might have been overlooked entirely without the aid of the laboratory. Neurologic symptoms of paresis are not always present even though the person is insane and suffering from dementia paralytica.

The literature mentions other conditions which may cause a positive Wassermann reaction. They are rare and may be easily ruled out. Such conditions as epidemic encephalitis and multiple sclerosis may cause a colloidal gold curve of the paretic type, but the associated clinical picture usually suffices to establish the clinical entity present.

Conclusions.—1. In mental or nervous cases routine blood and spinal fluid examination is necessary, and should be repeated at intervals if any doubt arises.

2. Treatment should be instituted if sufficient clinical evidence is present even though the serology be negative.

STAFF MEETING OF THE KING'S DAUGHTERS' HOSPITAL, GREENVILLE, MISS.

April 6, 1932.

The staff of the King's Daughters' Hospital met April 6, and at seven-thirty a delicious dinner was served, the following members being present:

Drs. Lucas, Beals, Paul Gamble, Acree, White, Pegues, Montgomery, Beck, Dickens, Shackleford, Hugh Gamble, Payne, Davis, Wilson, Archer, Lewis, Eubanks, Hirsch.

The meeting was called to order after the dinner by the president, Dr. John Archer, who introduced as visitors of the staff Dr. Cooper of Catchings, Dr. T. F. Wilson of Arcola, and Dr. Westmoreland of Murphy, accompanied by his son. After the routine business was disposed of, discussion of the activities of the hospital for the past month was had.

A paper and case report was presented by Dr. L. C. Davis on "Chronic Sinusitis," which was discussed by Drs. Montgomery and Hugh Gamble, the discussion being closed by Dr. Davis.

A case report was given by Dr. Paul Gamble on "Hypernephroma" with roentgen ray pictures and pathological specimen. This report was discussed by Drs. Hirsch, Payne, and Beals, with Dr. Gamble closing the discussion.

The next meeting of the staff of the King's Daughters' Hospital was moved up one week on account of the meeting of the American Medical Association in New Orleans on the regular meeting date.

The subject of the State Medical Association meeting was brought up and it was urged that every one present make an effort to attend the meeting.

F. M. Acree.

Abstract—Chronic Paranasal Sinusitis.—Dr. L. C. Davis.

Patient.—White, female, aged 37, was seen in her home October 30, 1931.

Complaint.—Severe pain and numbness in neck, left arm and left leg.

Family Histry.—No cancer or tuberculosis in family. Nothing else remarkable.

Past History.—Has had diseases common to childhood but otherwise healthy till onset of present illness. Mother of four children, three of whom died of colitis. Had one miscarriage.

Present Illness.—Seven months ago began having tingling sensations in left arm and left leg. Pain and numbness became worse so that at the end of one month she could not walk or move her left arm.

Examination.—An obese white female mentally clear. Pulse 165, B. P. 132/80, heart in normal position, no murmur and regular in action. No evidence of pulmonary disease. No disease of gastro-intestinal tract. Reflexes normal. Pupils equal and react to light and in accommodation, media clear, fundi normal, vision good in each eye. Nares patulous, mucous membrane healthy in appearance, nasal septum straight, enlargement of left anterior ethmoid cells, antra and frontals clear under transillumination. Roentgen ray revealed enlargement and thickened walls of left ethmoid cells and other sinuses clear.

Laboratory Examinations.—Total red and white cell count within normal limits, differential leukocyte normal, blood wassermann negative. A history of two negative basal metabolism readings so none made. Urinalysis showed trace of albumen otherwise negative.

Diagnosis.—Intracranial new growths, brain abscess, intracranial hemorrhage, hyperthyroidism, gumma and hysteria were considered.

Treatment.—Lavage of left antrum with recovery of 2 cc. mucopurulent material and breaking over of left middle turbinate with improvement in symptoms at the end of one week. Complete abatement of symptoms with above treatments was obtained in January, 1932.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

TRANSACTIONS ORLEANS PARISH MEDICAL SOCIETY.

May 2—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

May 5—Clinico-Pathological Conference, Touro Infirmary, 11 A. M. to 12 Noon.

May 6—Pathological Conference, Hotel Dieu, Dieu, 11 A. M. to 12 Noon.

May 6—Physiology Seminar, Tulane Medical School, 5 P. M.

May 9—House of Delegates, Louisiana State Medical Society, 9 A. M., Tulane Medical School.

May 9—House of Delegates, American Medical Association, 9 A. M. Auditorium.

May 10—House of Delegates, Louisiana State Medical Society, 9 A. M., Tulane Medical School.

May 10—House of Delegates, American Medical Association, 9 A. M. Auditorium.

May 10—Opening Meeting, American Medical Association, 8 P. M. Auditorium.

May 11—American Medical Association Meeting, 9 A. M. Auditorium.

May 11—Touro Infirmary Staff, 8 P. M.

May 12—Clinico-Pathological Conference, Touro Infirmary, 11 A. M. to 12 Noon.

May 12—French Hospital Staff, 8 P. M.

May 13—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 13—Physiology Seminar, Tulane Medical School, 5 P. M.

May 16—Hotel Dieu Staff, 8 P. M.

May 19—Clinico-Pathological Conference, Touro Infirmary, 11 A. M. to 12 Noon.

May 19—Eye, Ear, Nose and Throat Club, 8 P. M.

May 20—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 20—I. C. R. R. Hospital Staff, 12 Noon.

May 20—Physiology Seminar, Tulane Medical School, 5 P. M.

May 23—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

May 24—Baptist Hospital Staff, 8 P. M.

May 26—Clinico-Pathological Conference, Touro Infirmary, 11 A. M. to 12 Noon.

May 27—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 27—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of April besides the regular meeting of the Board of Directors, the Society held a joint scientific and first quarterly executive meeting and a regular scientific meeting.

At the joint scientific and quarterly executive meeting two papers were read and discussed as follows:

Tonsillectomy by Fractional Electro-Coagulation. Advantages and Disadvantages of Diathermy in Otolaryngology.

By:.....Dr. Geo. B. Collier

Discussed by Drs. C. L. Cox, J. B. Larose, N. H. Polmer, W. A. Lurie, M. P. Boebinger, J. P. O'Kelley and A. I. Weil.

Roentgenographic Visualization of the Liver and Spleen as an Aid in the Differential Diagnosis of Tumors of the Abdomen.

By.....Drs. C. J. Tripoli, E. Haam, and E. B. Lehman.

Discussed by Drs. Amedee Granger, L. J. Menville, W. H. Harris, Haam, F. M. Johns, C. W. Duval, N. H. Polmer and closed by Dr. Lehman.

At this meeting reports of the officers and various special and standing committees were read.

Dr. C. J. Landfried's name was proposed for Honorary Membership.

At the meeting held April 25 the following papers were read:

Personal Contribution to the Treatment of Fractures as the Result of Long Years of Study and Research.

By:.....Dr. E. Denegre Martin

Discussed by Drs. A. C. King and Paul A. McIlhenny.

History of Plague and Personal Experience with the Disease.

By:.....Dr. H. W. Knight

Dr. C. J. Landfried was elected to Honorary Membership at this meeting.

The following resolution presented by the Condolence Committee was adopted:

It is with a feeling of deep regret that we take note of the sudden and lamentable death of our

friend and colleague, Dr. J. Birney Guthrie, born in 1878. He received his degree of Bachelor of Science from Tulane University in 1896. After studying medicine at Tulane and the University of the South he graduated in 1900 from Tulane University valedictorian of his class, after an internship of two years in Charity Hospital.

Dr. Guthrie's ability as a teacher in medicine was recognized early in his professional career. He gained his spurs by virtue of his high intellectual attainments and by the success which he achieved as a teacher in medicine Tulane University bestowed upon him the professorship of clinical medicine, and upon the organization of the L. S. U. Medical School last fall he was called to the chair of medicine in that institution. Dr. Guthrie was a pioneer in radiology in this city and a fellow of the American College of Physicians; was on the medical staffs of Touro Infirmary, Hotel Dieu and Charity Hospital. He served with distinction during the World War and was two years in the service of his country. After the war he was made a colonel in the Medical Reserve Corps. He took an active part in organized medicine and at one time was 3rd vice-president of the Louisiana State Medical Society, and president of the Orleans Parish Medical Society in 1928. He contributed notable papers to medical literature and he took special pride in the contribution which he gave to physical diagnosis in emphasizing the importance of light percussion in cardiac disease.

Dr. Guthrie, at the time of his death, was a member of the American College of Physicians, Orleans Parish Medical Society, Louisiana State Medical Society and the American Medical Association.

Dr. Guthrie was a very handsome and distinguished looking man. He possessed a very high intellectual mentality and a very strong personality. He was always actuated by the highest principles and was impatient of anything which he considered inconsistent with these principles. Because of this characteristic he was misunderstood by some who entertained opinions about which there could be honest differences. He possessed many lovable qualities and his loyalty to his old friends was not the least. He was deeply interested in the study of medicine and his medical knowledge, his experience as a practitioner, his breadth of vision and his ambition to develop the department of medicine in his latest assignment, render his death a loss to our society and to our state.

THEREFORE, BE IT RESOLVED, That a copy of these resolutions be spread upon the minutes of the Society, and a copy be sent to the family of the deceased member.

We regret to report the resignation of Dr. Herbert H. Meyer, an Associate Member.

The Secretary's office has been very busy completing plans for the meeting of the American Medical Association. All committees have been meeting and making final arrangements.

APPLICATIONS POSTED.

Active.—Drs. J. J. Archinard, H. T. Beacham, C. A. Born, F. C. Hava, C. P. Holderith, C. W. Rossner and M. P. Sullivan.

Interne.—Drs. J. A. Alvarez, Leo. G. Davis, J. E. Granade.

LIST OF SUBSCRIBERS TO A. M. A. FUND FROM THE ORLEANS PARISH MEDICAL SOCIETY.

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Walther, H. W. E.
Wilson, M. F.
Williamson, G. Richarda
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OUT-OF-TOWN SUBSCRIBERS TO A. M. A. FUND.

Ayo, J. J.; Baker, C. M.; Caldwell, G. A.; Callihan, P. W.; Couvillon, W. F.; Engelbach, Theo; Frazar, F. R.; Frazar, J. D.; Horton, C. M.; Kappel, A. C.; Landrum, J. H.; Morris, H. G.; Smith, Glenn J.; Woolworth, J. D.

TREASURER'S REPORT.

Actual Book Balance, 2/29/32	$1,987.58
Receipts	2,861.47
Total Credits	4,849.05
Expenditures	1,160.29
Actual Book Balance 3/31/32	$3,688.76

LIBRARIAN'S REPORT.

One hundred and seventy-five books have been added to the Library during March, of which 7 were received by purchase, 20 from the New Orleans Medical and Surgical Journal, 40 by binding and 108 by gift. New titles of recent date are listed below.

A circular letter was sent to the membership the latter part of February asking for volunteers in the work of book reviewing—by which we secure practically all of our new textbook material. Out of 551 letters mailed, 26 answers were received, four of which were by personal call. Of these 26, nine were from men who have helped us with the book reviewing for the past three years.

Early in the month, it was suggested by Drs. Lanford and Oschner that the members of the Library staff keep for a specified time a daily notation of the various library routines which occupy their days, noting interruptions, etc. The Dean of the Medical School requested that this be done by the members of the Tulane Staff as well. This record has been kept since March 12. It is thought that much information relative to the processes of library work may be gained from such a record. Since this daily record is being kept, a notation of individual reference subjects has not been made. There are however, certain ones which it might be well to mention separately.

Nutritional Value of the banana.

Rupture of Uterus in Labor.

Lichen Planus of Mouth, Tongue and Throat.

Diathermy over Liver in Prevention of Surgical Shock.

Influence of Weather on Human Beings—Seasonal Influence on Suicidal Intent.

Treatment of Varicose Veins.

Cervix as a Source of Infection in Arthritis—diagnosis and therapy.

NEW BOOKS.

Washington Institute of Medicine v. 2. 1932.

Sluss—Emergency Surgery. 1931.

General Surgery—Practical Medicine Series. 1931.

Erxleben—Notes on Children's Nursing. 1931.

Margolis—Conquering Arthritis. 1931.

Rasmussen—Principal Nervous Pathways. 1931.

BiSodol Co.—Vomiting of Pregnancy. 1932.

Darrach—Epidemic Encephalitis. v. 2. 1932.

U. S. Commerce Dept. Manual of International list of Causes of Death. 1931.

U. S. Commerce. Warning agents for fuel gases. 1931.

Presse Medicale—L'enseignement de la medecine en France. 1932.

American Hospital Association—Transactions. 1930-31.

Hoffman—San Francisco Cancer Survey. 5. 7. 1931.

Konikow—Physicians Manual of Birth Control. 1931.

Straub—Surgery of the Chest. 1932.

Granger—Radiological Study of the Para-Nasal Sinuses and Mastoid. 1932.

Henry—Essentials of Psychiatry. 1931.

Dawson—History of Medicine. 1932.

Stryker—Courts and Doctors. 1932.

Bailey—Emergency Surgery. 1930. 2v.

Jewell—Handbook of tropical fevers. 1932.

Harrison—Diagnosis and Treatment of Venereal Diseases in general practice. 1931.

Blanton—Medicine in Virginia in the 18th Century. 1931.

H. Theodore Simon, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

H. Theodore Simon, M. D., Associate Editor

PRESIDENT'S PAGE

ADIEU.

My service as President of the State Society comes to a close about the time this issue of the JOURNAL reaches its readers. In bidding farewell to you all officially, I feel uppermost, a desire to say to each and everyone that my year's work has been one of real pleasure and made so by the cordiality I have met on all occasions by the profession wherever I have traveled.

DR. S. C. BARROW, PRESIDENT,
Louisiana State Medical Society.

It has been my wish and effort to meet and discuss with all, our mutual problems. This has been impossible, because of the bigness of the job, but the effort has been made and it has been gratifying to find united opinion among the physicians of the State on certain fundamental principles upon which rests the future of our American system of practicing medicine.

These principles must be upheld by us individually and in our organization, and must be established in the minds of the public in order that scientific medicine may continue to progress, which, of course, is the prime wish of all good doctors. This can only be done through organizations' efforts and the willingness of individuals to stand up fearlessly and express their convictions.

As you read this, my last President's Page, a few days remain for you to renew your membership in or join your local and State Society. Come with us, join with us in a pilgrimage to New Orleans for the American Medical Association and let each add his bit for a general better medical condition.

Assuring each and everyone that I appreciate and prize highly, the new friendships made and the old ones renewed this year during my official service, I bid you a presidential farwell with every sincere and good wish.

S. C. Barrow, M. D.,
President.

FIFTY-THIRD ANNUAL MEETING, LOUISIANA STATE MEDICAL SOCIETY.

The fifty-third meeting of the organization will be largely a business meeting. The House of Delegates will be called to order on Monday, May 9, at 9:00 a. m., in the Green Room of the new Hutchinson Memorial Building, 1430 Tulane Avenue. After the business meeting, luncheon will be served to the officers and members of the House of Delegates by the Louisiana State University Medical Center at Charity Hospital. The House of Delegates will meet again in the afternoon of the same day, and the last meeting will be held Tuesday morning, May 10. There will be a general meeting, to which everyone is invited, at 8:30 p. m., in the auditorium of the Hutchinson Memorial Building. The two important features of the evening program will be the Presidential Address, to be given by our President, Dr. S. C. Barrow, and the presentation of emblems to the living Past Presidents. There are twenty-two living Past Presidents of the Louisiana State Medical Society, the oldest of whom, in chronological order, is Dr. Rudolph Matas, and the youngest Past President in point of service will be the retiring President, Dr. S. C. Barrow. It is earnestly hoped that all members of the House of Delegates will attend this meeting, and that the members of the Louisiana State Medical Society who are in New Orleans for the purpose of attending the

American Medical Association will make a sincere effort to be present as well.

MEETINGS DURING THE WEEK OF THE AMERICAN MEDICAL ASSOCIATION.

THE AMERICAN HEART ASSOCIATION.

The Scientific Session of the American Heart Association will be held on Tuesday, May 10, 1932, from 9:30 a. m. to 5:30 p. m., in the New Orleans Municipal Auditorium, Rampart and St. Peter streets, New Orleans, Louisiana.

THE AMERICAN COMMITTEE FOR THE CONTROL OF RHEUMATISM.

This organization will meet Monday, May 9, at 9:00 a. m. to 12:00 noon, probably in the Roosevelt Hotel. A most interesting program has been arranged as a symposium on rheumatic diseases to which physicians, medical students, nurses, and physiotherapists are cordially invited. The program consists of eight papers, with three additional ones if time permits. Among the essayists is Dr. E. Starr Judd, President of the American Medical Association.

MEDICAL VETERANS OF THE WORLD WAR.

The Medical Veterans of the World War will have their annual meeting and dinner during the American Medical Association meeting in New Orleans. It will be at the Roosevelt Hotel, at 6:00 p. m., May 10, 1932, for men only. The speakers will be Dr. Rudolph Matas, Dr. Charles H. Best, and Francisco M. Fernandez. Tickets may be obtained at Registration Bureau or hotel desk. All medical veterans are invited. For additional information apply to Lieutenant Colonel McIntyre, M. C., United States Army, 423 Canal Street, New Orleans.

THE AMERICAN SOCIETY OF CLINICAL PATHOLOGISTS.

The American Society of Clinical Pathologists will meet in New Orleans on Friday and Saturday, May 6 and 7.

Meetings will be held in the auditorium of the Jung Hotel during both of these days, and are open to all physicians and technicians engaged in medical work. A number of scientific exhibits will be on display in the Florentine Room of the same hotel.

THE ASSOCIATION FOR THE STUDY OF INTERNAL SECRETIONS.

This organization will meet in their sixteenth annual session beginning Monday, May 9 and extending through Tuesday. The meetng wll be called to order in the Hotel Roosevel by the President, Dr. Joseph C. Aub. A splendid program has been arranged including such names as Cunningham, Newburgh, Schaffer, Webster, Means, Hoskins, Hartman, Swingle, and Rowntree. Dr. L. R. DeBuys is Chairman of the Committee on Arrangements.

The American Medical Golfing Association will hold its Eighteenth Annual Tournament in New Orleans on Monday, May 9, 1932. The thirty-six hole match will be played over the beautiful and interesting New Orleans Country Club course, followed in the evening by the golfers' banquet and distribution of prizes. Approximately fifty trophies and prizes will be distributed to winners in the various events.

DR. MATAS DELIVERS BALFOUR LECTURE.

The Donald C. Balfour lectureship in Surgery was delivered by Rudolph Matas, Emeritus Professor of Surgery, Tulane University of Louisiana, on Tuesday, April 5, 1932, in Convocation Hall of the University of Toronto. This lectureship commemorated the one hundred and fifth anniversary of the birth of Lord Lister. Dr. Matas took for his subject "The Story of Postoperative Pulmonary Embolism before and after Lister."

NEW ORLEANS GASTRO-ENTEROLOGICAL SOCIETY.

At a meeting of the New Orleans Gastro-Enterological Society, held in February, the following officers were elected: President, Dr. A. L. Levin; vice-president, Dr. Herbert L. Weinberger; secretary-treasurer, Dr. Donovan C. Bowne. The Society holds its meetings every two months, and the last meeting was held on April 14, in the Library of Charity Hospital. It is the aim of this Society to foster the advancement of Gastro-Enterology and members are privileged to invite guests to the meetings.

D. C. Browne, M. D.,
Secretary.

THE EAST AND WEST FELICIANA BI-PARISH MEDICAL SOCIETY.

The Bi-Parish Medical Society met in the East Louisiana State Hospital. Dr. Glenn J. Smith read a paper prepared by Dr. McConnell, who was unfortunately ill with influenza. The title of the paper was "Constitutional Psycopaths and Their Segregation." Discussion was opened by Dr. Robards and freely and favorably discussed by other members present.

Dr. P. H. Jones, Jr., of New Orleans read a paper on "Amebiasis," which was freely and favorably discussed by members present.

A vote of thanks was extended to Drs. McConnel, Smith and Jones for the preparation and presentation of their most excellent scientific papers. Dr. P. H. Jones, Sr., was elected an honorary member.

Members present were: Drs. Shaw, Miller, P. H. Jones, Sr., and Jr., Wilkinson, Robards, Green, Blakeney, C. S. and E. M. Toler, Leo Smith, Gilbeau, Turner and Stanley; the Rev. Nelson, Mrs. Smith, Mrs. Miller, Mrs. Burnham, Misses Late and Campbell.

The Society adjourned to meet first Wednesday in June 7:30 p. m., in the East Louisiana State Hospital.

E. M. Toler, M. D.,
Secretary.

OUR LADY OF THE LAKE SANATARIUM.

On March 23, 1932, the staff of Our Lady of the Lake Sanatarium presented a symposium on Tuberculosis in honor of Robert Koch's discovery of the tubercule bacillus. The program was as follows:

"History of Robert Koch and His Discovery of the Tubercle Bacillus," by Dr. E. O. Trahan, Chief of Staff.

"Pathological Anatomy of Tuberculosis," by Dr. J. L. Bevin.

"Childhood Type Tuberculosis," by Dr. Cecil O. Lorio, F. A. C. P.

"Tuberculosis in Adults," by Dr. Guy Riche.

"Roentgen Ray of Tuberculosis," by Dr. Lester J. Williams, F. A. C. P.

"Tuberculosis of the Eye, Ear, Nose and Throat," by Dr. C. A. Weiss.

"Surgical Aspect of Tuberculosis," by Dr. Tom Spec Jones.

"Hospitalization of Tuberculosis," by Dr. Geo. Sitman.

The program was very well attended and liberally discussed.

NEWS ITEM.

On April 14, 1932, Prof. Charles J. Bloom of the Graduate School of Medicine of the Tulane University of Louisiana, presented a paper on "Calcium Therapy" at a meeting of the French Hospital Staff, New Orleans.

On April 20, 1932, Prof. Bloom addressed the meeting of the Alabama State Medical Association at Mobile, Ala., on "The Role of Calcium and Phosphorus in the Prevention and Cure of Rickets."

Prof. Thomas Benton Sellers, with the Graduate School of Medicine of the Tulane University of Louisiana addressed the meeting of the Alabama State Medical Association, held at Mobile, Ala., April 20, 1932, on "The Diagnosis and Office Treatment of Commonly Neglected Gynecological Conditions." Dr. Sellers was the fraternal delegate from the Louisiana State Medical Society.

Dr. Allan C. Eustis, Professor of Clinical Medicine with the Graduate School of Medicine of the Tulane University of Louisiana, attended the meeting of the Mississippi State Medical Society, at Jackson, Miss., April 12 to April 14, 1932, and presented a paper on "Headaches, Causes and Treatment." Dr. Eustis was the fraternal delegate from Louisiana at this meeting.

Dr. Leon J. Menville, recently attended a dinner at the New York Athletic Club given in honor of Dr. Joseph Colt Bloodgood, of Johns Hopkins Hospital. This dinner was arranged by the editorial board of "The American Journal of Cancer" to summarize American accomplishments in the field of cancer research on the eve of Dr. Bloodgood's dparteur for a lecture tour in Europe.

Dr. Francis Carter Wood, of Columbia University, was toastmaster. Several announcements of importance were made in regard to recent experimental research work having a bearing on cancer. Among these was the announcement of a new X-ray tube capable of withstanding an enormous voltage. Another announcement—made at the request of the toastmaster—was the visualization of lymph nodes in living animals by Doctors Menville and Ane.

Among the speakers were: Dr. Dean Lewis of Johns Hokpins University; Dr. Francis Carter Wood ,editor of "The American Journal of Cancer;" Dr. Leon J. Menville, editor of "Radiology;" Dr. J. Bently Squire, president of the American College of Surgeons; Dr. Burton T. Simpson, director of the New York State Institute for the Study of Malignant Diseases; ;Dr. Byron Jackson, president-elect of the Radiological Society of North America.

UNITED STATES PUBLIC HEALTH SERVICE ITEMS.

Past Assistant Surgeon W. F. Ossenfort, much to the regret of the many friends that he has made in New Orleans during his tenure of duty in the Marine Hospital, has been relieved from duty here on or about March 26 and assigned to duty at the United States Penitentiary, Atlanta, Georgia.

A Board was convened May 2, 1932, at the Marine Hospital, New Orleans, for the purpose of examining candidates entering the regular corp of the United States Public Health Service. The detail for the Board was Medical Director L. L. Lumsden, Chairmen, Surgeon William Y. Hollingsworth, member, and P. A. Surgeon Guy H. Faget, Recorder.

IBERVILLE PARISH MEETING.

The medicoes of the parish were entertained by Dr. White Glendower Owen at his Nottoway home, near White Castle, on Saturday evening. There were present Drs. E. L. Major, W. H. Wagley, Eugene Holloway, S. C. Levy, Adrian A. Landry, William E. Barker R. D. Martinez, Guy A. Darcantel, Cyril Eby and W. G. Owen.

The guest of honor was Dr. Edgar Burns of New Orleans, who read an interesting paper on his specialty, illustrated on the screen.

The President, Dr. S. C. Levy, also delivered an address covering the activities of the past year. The following officers were elected: President,

Dr. W. H. Wagley; vice-president, Dr. G. A. Darcantel; secretary and treasurer, Dr. William E. Barker; delegate to state convention, Dr. W. G. Owen; alternate, Dr. A. A. Landry.

INFECTIOUS DISEASES OF LOUISIANA.

Dr. J. A. O'Hara, in collaboration with the United States Public Health Service, has issued weekly morbidity reports which briefly abstracted show the following and outstanding features. For the week ending March 19 there was reported for the State of Louisiana 56 cases of measles, 80 of syphilis, 41 of diarrhea, 32 of influenza, 23 of diphtheria, 21 of scarlet fever, and 14 of typhoid fever. The typhoid fever cases were scattered rather widely over the state. The following week, ending March 26, the outstanding feature was the large number of measles cases reported, 219 in all in various parishes. The instance of other important and frequently reportable diseases were as follows: Eighty-nine of whooping cough, 60 of influenza, 50 of syphilis, 17 of diphtheria, 21 of pneumonia, 21 of tuberculosis and 12 of typhoid fever. Two cases of leprosy were reported from New Orleans for this week. For the week which ended on April 2, it was found from these morbidity reports that the measles epidemic had increased, there being 236 cases reported. On the other hand, whooping cough had dropped to 27 cases, and influenza to 36. There was also reported the following: Forty-three of syphilis, 28 of tuberculosis, 19 of pneumonia, 29 of diphtheria, and 14 of typhoid fever. All except 3 of the diphtheria cases came from Orleans Parish, and 4 of the 14 cases of typhoid fever from Rapides. During the fourteenth week of the year, which ended April 9, the reports show that the instance of measles had markedly decreased, there being only 27 cases listed for this particular week. The other diseases which occurred in double figures were as follows: Twenty-eight of whooping cough, 61 of syphilis, 16 of typhoid fever, 15 of scarlet fever, 31 of pulmonary tuberculosis, 34 of pneumonia, 37 of influenza, and 28 of diphtheria. Four cases of smallpox were reported from Caddo Parish and 2 others as well. Of the 16 cases of typhoid fever, 4 of them came from the Parish of Evangeline. For the week ending April 16, the instance of measles had increased markedly, there being 103 cases reported. The number of cases of other important diseases recorded during this week were as follows: Forty-two of pulmonary tuberculosis, 31 of diphtheria, 17 of cancer, 17 of pneumonia, 18 of syphilis, 13 of whooping cough, and 12 of typhoid fever. One case of poliomyelitis was reported, 3 cases of smallpox, 1 of tularemia, and 1 of leprosy.

HEALTH OF NEW ORLEANS.

The Department of Commerce, Division of Vital Statistics, has published the following information concerning mortality conditions in the city of New Orleans. For the week ending March 12 there were 159 deaths in the city, 99 of which were white and 16 of which were colored, giving a total death rate of 17.5, the white rate being 15.4 and the colored 22.8. During the week the infant mortality rate was 57. For the week ending March 19, the death rate had raised somewhat, being 18.1, 24.4 for the negro, and 15.5 for the white, as a result of 100 deaths in the white population and 64 in the colored. The infant mortality rate had jumped up to 91 as a result of a surprisingly large rate among the white population of 113, as contrasted with only 49 among the negroes. The week ending March 26 still showed a death rate higher than it has been for some time. There were 102 deaths among the whites and 64 among the colored population, giving a death rate of 24.4 for the latter, and 15.8 for the former, with a total rate of 18.3. The infant mortality rate for this week was 63, for the white 70, and for the negro population 49. The next week, ending April 2, the death rate had dropped considerably. There were only 138 deaths this week, with a total death rate of 15.2. The death rate for the white population was 13, and the colored 20.5. The infant mortality rate had also diminished considerably, and the usual ratio between white and colored was followed. The death rate in the white infants was 35 and the colored 98. For the week ending April 9 there was a slight increase in the number of deaths, there being 149 in all, giving a death rate of 16.4. The white death rate was 15, and the colored 19.8. The infant mortality rate for the total population was 68, 32 for the white and 98 for the colored.

The 1931 death rate was lower than in previous years. The 1932 death rate so far is well below that of 1931. For the first 14 weeks of the year the 1932 rate is 16.0, as contrasted with 19.3 in 1931. The death rate among the white population, namely, 13.6, compares very favorably with most of the larger cities in the United States.

THE SLIDELL PREVENTORIUM.

The Orleans Parish Tuberculosis and Public Health Association conducted a George Washington bicentennial tree planting ceremony Saturday, April 16, on the grounds of their Preventorium, at Slidell, La. The program was under the general chairmanship of Mrs. Edward Pilsbury, assisted by an able committee—

Mrs. Jesse P. Wilkinson, Chairman of Arrangements; Mrs. M. Miller, Supervisor; Mrs. R. L. Skinner, Mrs. G. S. Miller, Mrs. J. M. Koelle, Mrs. J. Richards, Miss Alma Goetz, hostesses; Dr. and Mrs. J. K. Griffith, chairmen, Slidell arrangements.

The program was as follows:

Invocation .....Rev. R. L. Stillwell
The Planting Song.....Assembly
Pledge .....Boy Scouts-Children
Address .....Hon. H. G. Fritchie, Mayor
Address .....Hon. L. V. Cooley, President Lions' Club

Planting of trees:

For George Washington—Dr. J. K. Griffith; Mr. E. W. Eddins; Mrs. W. D. Clayton; Mrs. J. E. Friend; Mrs. A. L. Pilsbury; Mrs. R. L. Skinner; Mrs. F. C. Kolman; Mrs. L. Kemper Williams; Dr. Chaille Jamison; Dr. W. H. Seemann; Miss Anna Kennedy; Mrs. Jesse P. Wilkinson; Mrs. Edward Pilsbury.

Address.....Rev. Father F. Ballaye
Address .....J. Dowling
Benediction .....Rev. R. I. Long
Songs: America, Star-Spangled Banner..... Assembly

Living trees were dedicated to Mrs. John Dibert, J. Paul Haller, D. L. Watson, M. D., J. G. Dempsey, M. D., Mrs. Henry Alcus, Mrs. Adolph Baumgartner, Mrs. A. T. H. Bradford, Mrs. Charles F. Buck, Jr., Mr. Ernest A. Burguieres, Miss Kitty Council, Joseph A. Danna, M. D., Mrs. P. N. Gravois, Edmund L. Leckert, M. D., William A. Lurie, M. D., Miss Agnest Morris, Mrs. Florence Stone, Mrs. James W. Warren, Rev. J. T. Hynes, Rev. Norman A. Maunz, John Signorelli, M. D., and Robert Strong, M. D.

The Preventorium at Slidell was the first to be organized in the State of Louisiana through the generosity of Mrs. L. Kemper Williams and by Mrs. Jesse P. Wilkinson and an efficient group of physicians and laymen headed by Dr. W. H. Seemann and Dr. Chaille Jamison. It had since its beginning the endorsement of the State and Parish Medical Associations.

The Preventorium has a capacity of 40. The number taken is governed by financial conditions. We have at present 12 children at the Preventorium. The children are selected from the hospitals clinics, schools, institutions and homes. They must be indigent and non-tuberculous. Children taken are under-privileged, anaemic or recovering from operations or illness. Every applicant receives a thorough physical examination, Mantoux test by our medical adviser, Dr. Suzanne Schaefer, and are roentgen rayed at the Charity Hospital. Boys are taken from six to twelve, girls from six to sixteen. They are kept at the Preventorium as long as necessary—not less than six weeks, and some as long as eighteen months.

The Preventorium is a remodeled farm house on a tract of 13 acres. There is a large barn which is used as a play-room. There is a truck garden and an artesian well—700 feet—considered one of the finest in the State of Louisiana. Mrs. M. Miller, Supervisor, conducts a well-balanced schedule, supervising study hour, rest period, story-telling hour and recreation. Dr. J. K. Griffith is in charge of the Preventorium at Slidell.

Hon. L. V. Cooley, President of the Lions' Club, summed up the history of the Preventorium in his address at the Tree Planting. Mr. Cooley said: "We people in Slidell have watched from the beginning the growth of this Preventorium. We know its worth—we know what it has done and what it can do, and we are proud to claim this Preventorium as a part of the constructive work done here in Slidell."

The Orleans Parish Tuberculosis and Public Health Association is affiliated with the National Tuberculosis Association through the Tuberculosis and Public Health Association of Louisiana, of which Dr. W. H. Seemann is President.

WOMAN'S AUXILIARY NEWS.

MOREHOUSE PARISH.

On Tuesday, March 8, our Woman's Auxiliary met in the usual monthly meeting, this time in the home of Mrs. Owen, wife of Dr. Owen of Bonita Louisiana. A goodly number was present and enjoyed a splendid program.

Dr. Owen made an interesting talk on current events which added variety. Little Miss Billy Owen played several piano selections, which were greatly enjoyed. The home was fragrant with gorgeous spring flowers from Mrs. Owen's own flower gardens. Mrs. R. B. Leavell gave a musical number which was very much appreciated. Refreshments, consisting of a delicious salad course, were served by the gracious hostess assisted by her little daughter.

Our Auxiliary has contributed a "book shelf" to our hospital and anyone wishing to donate a book will make a welcome gift to the hospital. Several good books have been given already, and any book one wishes to pass on to convalescing patients at the Morehouse Parish General Hospital will surely be appreciated.

We, as an Auxiliary, are doing our best to help in any way we are needed and at any time.

Mrs. J. Newton Jones,
Publicity Chairman.

CADDO PARISH.

Our very active Shreveport Auxiliary sends in an excellent report from their Hygeia Chairman, Mrs. T. F. Hawkins: "Our program for the year has consisted of endeavoring to attract the attention of the public to a source of reliable information in regard to health and disease as presented by the publication, Hygeia. In trying to carry this idea out we have presented all the schools in our city with a subscription to this magazine, also placing it in as many doctors' of-

fices, private homes, and public libraries as possible."

It is very pleasant to be able to print such a report as the above and Shreveport is to be congratulated on its wide-awake Auxiliary.

ORLEANS PARISH.

The Woman's Auxiliary to the Orleans Parish Medical Society met at the Orleans Club, Wednesday, April 13, at three o'clock. A large number of the members were present and the auxiliary can now claim a membership of 317 in good standing. It was decided to co-operate with the Social Hygiene Committee and make that work a definite part of the Auxiliary's program. Mrs. W. W. Butterworth was appointed by the president, Chairman of this committee, with the privilege of choosing her own workers.

The Philanthropic Committee had a good report of having distributed 75 garments to the different organizations they are interested in.

A year book was decided upon and there is every prospect that we can look forward to something quite worth while, and it will give others an idea of what the organization has been doing.

A very important motion was made and seconded, that of putting yearly half our money from the general account into the commemoration fund, which is a savings account, to be used in some charitable way. This commemoration fund has been an ideal of the Auxiliary since its inception, and we have made strenuous efforts to make it grow. The idea is a fine one, to give money to the fund for any event, sorrowful or joyous, and thereby getting enough together that will give us something enabling us to do an important piece of work.

Mrs. Joseph Hume, General Chairman of the coming convention of the Woman's Auxiliary to the American Medical Association, presented her final plans, which were received with much enthusiasm.

We trust that our guests will enjoy the entertainments as much as we have the planning of them.

JAMBALAYA.

Our west coast states now show active Auxiliaries from Canada to Mexico.

A member of the Sacramento Auxiliary is supplying a course of three studies of the California public health laws and regulations. This Auxiliary at one of its meetings had the pleasure of hearing Dr. June Harris give his able lecture on "The History of Medicine in Northern California." This brings the reflection that there is not a state where the history of its medicine men may not form a thrilling and inspiring true story.

The Minneapolis Auxiliary, at its January meeting, voted a $300.00 student loan fund for medical students at the University of Minnesota, this fund to be administered by the Dean of the University.

MEDICAL EDUCATION.—More time in the medical school curriculum should be given to teaching internal medicine and to taking histories. The student who should be taught how to ask questions and how to record and interpret the significance of the answers. This is almost a lost art, the student relying too much on laboratory determinations.

I have many times told my students that if I could not make both the oral examination and the physical examination, I would omit the latter. Properly directed questions and a careful study of the answers will tell whether the patient has a defective heart and whether or not he needs special treatment of that condition; whether or not he has beginning tuberculosis; and whether or not he has some other serious disturbance or pathological condition. The careless physician who does not make a diagnosis many times succeeds in aiding the patient because he knows how to ask questions, and the practitioners of many medical cults succeed in benefiting patients for the same reason.—Osborne, Oliver T.: Med. Jr. and Record, Oct. 1, 1930.

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MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor *D. W. Jones, Associate Editor*

THE ANNUAL MEETING.

The Sixty-fifth Annual Session of the Mississippi State Medical Association, at Jackson, on April 12, 13, and 14, was a great success. All honor to Dr. John C. Culley President, and to every officer of the Association for a year of hard and constructive work. They have kept organized medicine in Mississippi moving upward and have turned over to their successors a standard well worth following.

The twenty-ninth session of the House of Delegates was a busy one. For the first time, the entire forenoon of the first day was given over to business of the Association and the House met daily thereafter. Next year the House of Delegates will be presided over by a speaker, Dr. Percy Wall of Jackson, well known throughout the state as a leader.

Meeting in conjunction with the Medical Association was the Women's Auxiliary of the Mississippi State Medical Association, and the Mississippi State Hospital Association.

It was truly a week of great interest to everyone connected in any way with medicine.

JAMES M. ACKER, JR., M. D.
Aberdeen, Mississippi.
President of the Mississippi State Medical Association.

FROM OUR PRESIDENT.

To the Members of the Mississippi Medical Association:

Please accept at this time my sincerest thanks and appreciation of the highest honor within the gift of the Mississippi State Medical Association, the office of President. I find that words are inadequate to really express my feelings. My only qualification for this honor is my great desire and willingness to serve you efficiently through the coming year. The Mississippi Medical Association, during its 65 years of existence, has had many men of great ability at its head. It has accomplished much, but still there must be many things that can be done. Whether anything of note will be perfected during my term of office remains to be seen. My hope and prayer is that I may be able to do something that will merit recognition and justify your selection of me.

At the present time I have no plans. You have just ended a most successful year under the able leadership of Dr. John Culley. Dr. Culley gave freely of his time and talents and made one of the best Presidents the Association has ever had. His activities in regard to the Mississippi Medical Department at the University were most commendable. It is my desire and purpose to do everything in my power to see what Dr. Culley had advocated and worked for, in regard to this matter, come to pass. My position is most emphatically one favoring a continuation of this two-year medical school.

In regard to membership, it is my wish that the President-and the Vice President have charge of increasing, or at least maintaining, our present high percentage of members.

I shall very shortly communicate with the President-elect and Vice-Presidents and urge them to contact the component societies with this end in view. I am very anxious that the membership of the Ladies' Auxiliary be also increased. I feel that this can be done.

In conclusion let me say again, as I have said many times before, that I want the advice and council of all members of the Association. Feel

free to approach me on any subject that you see fit. I shall always be ready and anxious to cooperate with you in any way possible. Many times, mistakes may be avoided by advice from wiser and more experienced heads of which the Mississippi Medical Association has many.

James M. Acker, Jr.

OFFICERS FOR 1932-33.

President, J. M. Acker, Jr., Aberdeen.

President-elect, John W. D. Dicks, Natchez.

Vice-Presidents, B. S. Guyton, Oxford; J. S. Hickman, Philadelphia; Riley Burnett, Biloxi.

Historian, E. F. Howard, Vicksburg.

Editor, Leon S. Lippincott, Vicksburg.

Associate Editors, J. S. Ullman, Natchez; D. W. Jones, Jackson.

Treasurer, E. L. Wilkins, Clarksdale.

Secretary, T. M. Dye, Clarksdale.

Council: First district, J. W. Lucas, Moorehead; second district, L. L. Minor, Route 4, Memphis Tenn; third district, M. W. Robertson, Corinth; fourth district, T. J. Brown, Grenada; fifth district, W. H. Watson, Pelahatchie; sixth district, H. Lowry Rush, Meridian; seventh district, Joe E. Green, Laurel; eighth district, W. H. Frizell, Brookhaven; ninth district, D. J. Williams, Gulfport.

Speaker of the House of Delegates, J. P. Wall, Jackson.

Delegate to the American Medical Association, H. A. Gamble, Greenville.

Fraternal Delegate to Alabama State Medical Association, J. W. Lipscomb, Columbus.

Fraternal Delegate to Tennessee State Medical Association, D. W. Hamrick, Corinth.

Fraternal Delegate to Arkansas State Medical Association, D. C. Montgomery, Greenville.

Fraternial Delegate to Louisiana State Medical Society, A. Street, Vicksburg.

Budget and Finance Committee, S. E. Eason, New Albany; D. C. Montgomery, Greenville; W. L. Little, Wesson.

SECRETARY'S REPORT.

To the House of Delegates, Mississippi State Medical Association.

Gentlemen: At a called meeting of your House, held on April 11, 1932, the date for holding the 1932 session of the Association and of the House of Delegates was changed from May 10 to April 12.

Very soon after the adjournment of the 1931 session of your House, Treasurer L. W. Cooper resigned and President Culley appointed E. L. Wilkins of Clarksdale to act until this meeting. Treasurer Cooper's accounts were all carefully audited, a new bond in the sum of $15,000 was made for the Acting Treasurer, and all moneys and papers were turned over to him.

On August 20, 1931, Councillor W. G. Gill of the sixth district died and President Culley appointed H. Lowry Rush of Meridian to act as Councillor until this meeting.

The apportionment of Delegates to the American Medical Association is made upon the basis of one delegate for each eight hundred members, or fraction thereof, as of April first. Some years ago your House made all members delinquent after April first so that we might have a full membership at the time of the apportionment. Last year the date for becoming delinquent was changed to February first. Had the apportionment been made this year we would have lost one delegate, as we did not have a membership of eight hundred on April first. I recommend that the date for becoming delinquent be changed back to April first.

I recommend that the President-elect and the three Vice-Presidents be made members of the House of Delegates.

At the 1931 session of the House the following proposed changes in the Constitution were introduced, and should come up at this session for final disposition.

Change Article III.

Change Article IV, Section 2.

At the last session of the 1931 House proposed changes in Chapters VI and VII of the By-Laws were introduced, and should be brought up at this session. Inadvertently these by-law changes were printed in the By-Laws.

Sincerely yours,

T. M. Dye, Secretary.

BUDGET.

To the Budget and Finance Committee.

Gentlemen: I recommend for your guidance the following budget for the coming year:

President's expense account	$100.00
Secretary's salary	500.00
Secretary's expense account	100.00
Editor's expense account	300.00
Historian's expense account:	
Retouching photos and cuts	170.00
Council's expense account	100.00
N. O. Medical and Surgical Journal	900.00
Transactions	300.00
Expense, Annual Meeting	300.00
Incidentals	50.00
Total	$2,820.00

Sincerely yours,

T. M. Dye, Secretary.

O. K. W. L. Little, S. E. Eason, D. C. Montgomery.

REPORT OF COUNCIL.

To the House of Delegates, Mississippi State Medical Association.

Gentlemen: During the past year the Council

has been in session twice—once in special session on call of the President, Dr. Culley, and once daily in regular session during the meeting of the State Association just drawing to a close.

The special session was held in the city of Jackson on March 18, 1932. This session of the Council was called by the President for the purpose of endorsing his action in calling a special session of the House of Delegates to change the time of meeting of the State Medical Association from May, 1932, to April 12, 13, and 14, 1932, and then interview appointments of a new Treasurer and Councilor for the fifth district.

The Council unanimously endorsed the above mentioned acts of the President. The Council has met daily during this session of the State Medical Association and with the exception of one Councilor, who was detained at home on account of a death in his family all councilors were present.

The Council, acting as the Medico Legal Committee of the Association, approved the defense by this Association of three malpractice suits, and postponed action on one case in order that the papers in the case might be completed by the physician asking for defense. Bills for attorneys in two cases that have been disposed of by the courts were ordered paid. The Council also stipulated the amount to be paid out of the Medico Legal fund for the defense in each of the malpractice suits approved for defense.

The Council endorsed the work of the Committee on Cancer Control. It is the opinion of the Council that in view of the increasing number of malpractice suits in Mississippi and the further fact that in many cases the basis for such suits lies in unguarded remarks made by patients, family or friends by physicians who are consulted by the patient after the original physician who had charge of the case has ceased to be connected with the case. These remarks, we are sure, are not intended to reflect on the first physician. They are thoughtlessly made, but are often misinterpreted by the laity to mean neglect or faulty treatment on the part of the first physician and form the basis for most malpractice suits.

We wish to request the fraternal delegates from our neighboring states to bring this matter to the attention of the profession in their respective states in order that concerted action may be taken.

The individual Councilors have been active in organization work in their respective districts. The reports of the Councilors show an active interest in organized medicine among the profession throughout the state.

REPORT OF COUNCILOR, SECOND DISTRICT.

In the second councilor district there are three medical organizations:

The North Mississippi Medical Society, which is composed of members from seven counties, as follows: Benton County has 2 members, 3 non-members; La Fayette County has 9 members, 6 non-members; Marshall County has 7 members, 3 non-members; Panola County has 6 members, 12 non-members; Tippah County has 6 members, 6 non-members; Union oCunty has 7 members, 10 non-members; Yalabusha County has 9 members, 7 non-members, which gives 46 members and 44 non-members. This society has also one member from LeFlore County and one from Tate County, totaling 48 members.

This gives the North Mississippi Medical Society a percentage of 52 plus.

The Tate County Medical Society has eight (8) members and five (5) non-members, which gives a percentage of 61 plus.

The DeSoto County Medical Society has 10 members and 3 non-members, which gives the percentage of 77 plus.

Our report is based on estimates of April 1, and, I am reliably informed that several members have paid their dues since this date. Each society has had two or more meetings during the year, with manifest interest.

Better times are ahead of us and a year hence I feel sure that there will be a marked increased of membership and therefore of interest.

This is a rural and small town section of our great commonwealth and the physicians seem to have felt the depression markedly.

We will continue to be diligent in our efforts. I beg to be,

L. L. Minor,
Councilor, Second District.

REPORT OF COUNCILOR, FOURTH DISTRICT.

The President and House of Delegates, Mississippi State Medical Association:

I hand you herewith my report as Councilor for the fourth district. I have visited five of the seven counties in the district. On July 6 made talk at Lexington, on October 5 one at Eupora, and on January 20 at Kosciusko.

The number of registered physicians in the several counties with membership in our local and State Association is as follows:

	Physicians	Members
Attala County	22	3
Carroll	9	3
Choctaw	9	1
Grenada	10	7
Holmes	27	9
Montgomery	12	7
Webster	12	3
	101	33

Owing to discrepancy in figures I am unable

to figure the exact percentage of membership, but an average of the counties for the district will run very near 75.

I hope to give you a better report on the ensuing year.

T. I. Brown,
Councilor Fourth District.

REPORT OF COUNCILOR, FIFTH DISTRICT.

To the House of Delegates, Mississippi State Medical Association.

This district is divided into three societies—Central, Issaquena-Sharkey-Warren, and Claiborne has a society, but not active.

Central Medical Society is composed of the following Counties: Hinds, Madison, Rankin, Scott, Simpson and Yazoo. Dr. Julius Crisler is the President and Dr. Robbin Harris is Secretary.

This Society had a paid-up membership of 107 on April 1. There are 168 doctors in the counties comprising this Society with 107 members, or 63 2-3 per cent of the available men belong to organized medicine. It holds regular monthly meeting with about 50 per cent of its membership in attendance. This Society has not failed to carry out a prearranged program in a number of years.

During the year this Society has suffered the death of one member, Dr. W. W. Smithson. There has been four law suits filed against members of this Society.

The Issaquena-Sharkey-Warren County Medical Society is composed of the three counties hyphenated. Dr. H. S. Goodman of Cary is President and Dr. Leon S. Lippincott is Secretary.

This society had a paid-up membership of 40 on April 1. There are 60 resident doctors in the area represented by this Society, or 66 2-3 per cent are members of organized medicine.

It holds a regular monthly meeting with a well arranged program. This Society has suffered the loss of one member by death, Dr. T. A. Heath of Issaquena County. So far as I know there has been no lawsuit filed against a member of the Society.

N. B.—Issaquen County has a special distinction of being the 100 per cent county of the district.

Claiborne County has a Society. Practically in name only. They hold no regular meetings. Only meet to elect officers and collect dues. There are eleven doctors in the county, according to the roster, and seven are members of the Society, or practically 54 per cent of the resident doctors of the county.

Summing up you will note there are 237 doctors in this district; 154 are members of the State Medical Association, or 64 per cent. In other words, more than one-third of the medical men in this district take no part in organized medicine.

W. H. Watson,
Councilor, Fifth District.

REPORT OF COUNCILOR, SEVENTH DISTRICT.

As Councilor for the seventh district, I am glad to report that although the depression has caused a slump in every line of work, we of the seventh district are about holding our own. My district has two Medical Societies: The South Mississippi and Clark-Wayne. The South Mississippi Society is composed of the following counties: Jones, Jasper, Lamar, Forrest, Perry, Greene, George Covington, Pearl River, Marion, Jefferson Davis, and Smith.

We hold our meetings quarterly the program beginning at 3:30 and continuing until 6:30, when lunch is served, and after which we continue until the program is completed. These meetings are usually well attended and it gives me pleasure to say that the Program Committee arranges most excellent scientific papers. It was our pleasure to have Dr. J. R. McCord, Professor of Obstetrics in Emery University, with us five days last August, and the meetings were well attended. Some of the physicians driving as far as 85 miles every day to attend these meetings and the doctors were very profuse in their praises of the splendid work being done by Dr. McCord. At our last meeting, in Laurel, we were favored with visits from Dr. Mull and our President, Dr. Culley, both of whom made inspiring addresses which were very much appreciated.

So far as I know we have no lawsuits pending against any physicians in our Society and I am indeed glad to say the fraternal spirit is most encouraging, and the broad-minded physicians are learning that we do not build our practice by condemning the other fellow.

The Wayne-Clarke Society is inactive, and although I have made several efforts to affect a dissolution of this Society, letting Wayne come to South Mississippi and Clarke go to East Mississippi, so far I have failed. However, so far as I can tell there seems to be no opposition to this move and I feel that we can get it through before our next Medical meeting.

Jos. E. Green,
Councilor, Seventh District.

REPORT OF COUNCILOR, NINTH DISTRICT.

The Ninth District is composed of Jackson, Harrison, Stone and Hancock Counties.

The Jackson County Medical Society has had four regular quarterly meetings with good programs and attendance during the past year. There are three doctors in the County who are not members. The other three Counties, Harrison,

Stone, Hancock, are organized into one Society with regular meetings which are held on the first Wednesday of each month with good programs and well attended. The membership consists of all desirable doctors in the Counties.

Daniel J. Williams,
Councilor Ninth District.

REPORT OF THE COMMITTEE ON PUBLICATION.

To the President and House of Delegates of the Mississippi State Medical Association.

In the past eleven months, your Committee on Publication has continued its efforts to make Mississippi's share of the New Orleans Medical and Surgical Journal worthy of this Association and of the greatest possible interest to all of its members.

Recognizing that our Journal is the official organ of the Louisiana State Medical Society and the Orleans Parish Medical Society as well as of the Mississippi State Medical Association, the comparative space devoted to Mississippi seems creditable.

The total number of scientific papers published was 87. Of this number 32 (37 per cent) were by Mississippi authors. The total pages devoted to scientific papers was 502. Of these 116 pages (23 per cent) were given to Mississippi authors. The total pages devoted to hospital transactions was 58. Of these, 35 pages (60 per cent) were devoted to Mississippi hospitals. The total pages devoted to news of the Louisiana State Society was 60. The total pages devoted to news of our own association was 151.

The papers read before the Mississippi State Medical Association at its annual meeting are published provided they comply with the rules. Papers from county societies are published when they furnish a contribution to scientific medicine. Many papers that bring about worthwhile discussion in local society meetings are not suitable for publication in a state journal. Such papers as are original or the result of work done to prove or disprove theory or practice are desirable and we ask that they be submitted for publication.

It is again urged that hospitals send in abstracts of interesting cases presented at staff meetings. If a case is worth reporting to a hospital staff, it will also be of interest to other hospital people and to others who do not have the advantages of hospital staff membership. Items of news in regard to staff meetings are also desirable.

Last year we attempted to organize a board of county editors and asked the presidents of county societies to appoint editors for all counties of the state. We are grateful for the cooperation of those presidents who complied with our request. We now have sixty county editors. The presidents of societies comprising 22 counties have not responded to repeated requests for appointments. It is the duty of a county editor to send in news of medical interest each month. Acknowledgment is made to those editors who have helped to make our journal this year. The following comprise the present board and the numbers after the names indicate the number of months in which items were received:

County	Editors	Months Items Recd
Adams	L. Wallin	8
Alcorn	W. A. Johns*	1
Amite	P. Jackson	1
Attala	C. A. Pender	2
Benton	F. Ferrell	None
Bolivar	C. W. Patterson*	4
Calhoun	F. L. McGauhy	None
Carroll	J. P. T. Stevens	None
Chickasaw	W. C. Walker	1
Choctaw	J. J. James	3
Hancock	C. M. Shipp	None
Harrison	C. McCall	2
Hinds	A. G. Wilde	None
Holmes	R. C. Elmore	None
Humphreys	G. M. Barnes*	1
Issaquena	W. H. Scudder	3
Ittawamba	W. L. Orr*	1
Jackson	B. S. McIlwain	5
Jasper	No editor	
Jefferson	R. B. Harper	None
Jefferson Davis	No editor	
Jones	No editor	
Kemper	No editor	
Lafayette	E. S. Bramlett*	None
Lamar	No editor	
Lauderdale	C. T. Burt	3
Lawrence	B. S. Waller	None
Leake	No editor	
Lee	W. A. Toomer*	None
Leflore	W. B. Dickins*	4
Lincoln	W. H. Frizell	3
Lowndes	J. W. Lipscomb	2
Madison	A. P. Durfey	3
Marion	No editor	
Marshall	D. R. Moore	None
Monroe	G. S. Bryan	10
Montgomery	J. O. Ringold*	1
Neshoba	J. S. Hickman	4
Newton	S. A. Majure	1
Nuxobee	E. M. Murphy*	None
Oktibbeha	H. L. Scales	1
Panola	G. H. Woods	2
Pearl River	No editor	
Perry	No editor	

Pike	T. Paul Haney Jr.*	3
Pontotoc	R. P. Donaldson	10
Prentiss	R. B. Cunningham	2
Quitman	No editor	
Rankin	H. N. Holyfield	None
Scott	W. C. Anderson	None
Sharkey	W. C. Pool	4
Simpson	No editor	
Smith	No editor	
Stone	S. E. Dunlap	None
Sunflower	R. M. Donald*	None
Tallahatchie	No editor	
Tate	W. D. Smith	1
Tippah	C. M. Murry	1
Tishomingo	A. E. Bostwick*	2
Tunica	No editor	
Union	H. P. Boswell	None
Walthall	B. L. Crawford	None
Warrem	E. H. Jones	10
Washington	F. M. Acree*	2
Wayne	No editor	
Webster	W. H. Curry	4
Wilkinson	S. E. Field	1
Winston	M. L. Montgomery	8
Yalobusha	G. A. Brown	None
Yazoo	C. M. Coker	6

*Appointed during the year; have not served full eleven months.

HONOR ROLL.

Your committee appreciate the interest and co-operation of the following who have contributed to the hospital transactions or the Mississippi news during the year; some have contributed monthly, others less often:

Acker, J. M.; Ackerman, J. J.; Acree, F. M.; Barnes, G. M.; Bell, Mrs. Ada A.; Bennett, T. L.; Birchett, J. A. K., Jr.; Bramlett, E. S.; Brown, T. J.; Brumfield, R. H.; Bryan G. S.; Burns, E. B.; Burt, C. T.; Coker, C. M.; Comack, K. R.; Clark, L. J.; Cooper, $. W.; Crofford, T. J.; Crawford, W. H.; Culley, J. C.; Culpepper, J. P.; Cunningham, R. B.; Curry, W. H.; Dickins, W. B.; Dicks, J. W. D.; Donaldson, R. P.; Dotson, L. M.; Durfey, F. P.; Dye, T. M.; Eason, S. E.; Fairfax, H. R.; Field, S. E.; Finlay, R. C.; Frizell, W. H.; Galloway, D. V.; Gamble, H. A.; Gaudet, L. S.; Gill, W. G.; Green, J. E.; Hagan, Z. C.; Haralson, H. H.; Hickman, J. S.; Holmes, T. W.; Howard, E. F.; Hughes, W. L.; Jackson, Paul; James, J.; Jarratt, G. C.; Jenkins, W. N.; Johns, W. A.; Johnston, S. W.; Jones, D. W.; Jones, Mrs. E. H.; Jones, E. H.; Knox, I. C.; Lipscomb, J. W.; Little, A. H.; Little, W. L.; Lucas, J. W.; McCall, C. H.; McCarthy, A. M.; McCrae, K. P.; McIlwain, S. B.; McLeod, H. C.; McRae, K. F.; McRae, W. W.; Majure, A. L.; Majure, S. A.; Martin, B. B.; Martin, V. B.; Minor, L. L.; Montgomery, D. E.; Montgomery, M. L.; Morris, K. A.; Moss, Mrs. Grace M.; Murry, C. M.; Nannery, N. W. Newcomb, J. W.; Page, A. G.; Parsons, W. H.; Patterson, C. W.; Pender, C. A.; Philpot, V. B.; Polk, Mrs. L. L.; Pool, W. C.; Price, L. B.; Rapt, J. M.; Rayburn, J. A.; Robertson, M. W.; Ross, T. E., Jr.; Rush, H. L. Rutledge, L. J.; Scales, H. L.; Scudder, W. H.; Smith, F. M.; Smith, W. D.; Speck, C. M.; Spencer, J. L.; Stennis, Dudley; Stennis, I. E.; Stephenson, R. M.; Stowers, W. K.; Strain, S. F.; Street, A.; Street, G. M.; Tillman, A. G.; Ullman, J. S.; Underwood, F. J.; Wallin, L.; Walker, William Ware, A. J.; Watson, W. H.; Wilkins, E. L.; Wilson, D. L.; Williams, Mrs. Dan; Woods, G. H.—112.

Last year it was suggested at a meeting of editors of state medical journals that in an ideal state journal all reports of officers and committees of the State Medical Association should be published before the annual meeting in order that the membership at large and especially the delegates should know in advance what was to be presented and thus be given time for thoughtful consideration to such matters as they should be called upon to decide. We published a few such reports last year. We published more this year. We ask that all reports be furnished for publication next year. We believe such publication will work for more mature and intelligent judgment.

Many organization require that any resolution having to do with policy or proposed activities shall be published in advance. The reasons for such requirements are the same as for reports. It is recommended that such resolutions to be presented to this Association be published before the meeting.

Every year there are numerous controversial subjects before the medical profession of our state. We would all be better able to form intelligent opinions if such subject were freely discussed in the Journal. We offer you the opportunity and urge its acceptance.

Finally your Publication Committee is conscientiously working to give you a journal of general interest. Suggestions and criticisms are always welcome. The New Orleans Medical and Surgical Journal is your journal. It should express your ideas of medicine. We ask your continued and further support.

Leon S. Lippincott,
D. W. Jones,
J. S. Ullman,
Committee.

RESOLUTIONS CONCERNING FOOD FADDISM.

WHEREAS: Much misinformation is promulgated today concerning the question of diets, thus causing the introduction of food fads, very few of which can take the place of the older staple foods; and whereas,

Any balanced diet should contain animal protein, fruit, vegetables, especially the leafy vegetables, and the better grades of bread prepared from flour which will insure adequate vitamine and mineral salt content, digestible fat such as butter-fat, and sufficient of the digestible carbohydrates to afford readily available energy; and whereas,

The allegation that white bread, meat or any other staple food, when employed in mixed diet is responsible for certain grave illnesses, is not supported by scientific facts.

THEREFORE BE IT RESOLVED THAT:

We desire in the public interest to place on record that in our opinion:

1. The exaggerated claims for various fad foods are unwarranted by scientific evidence or practical expreience; and the advertising and other propaganda furthering their substitution for the older articles of diet should be condemned.

3. The danger of nutritional deficiencies has been grossly exaggerated. No one food is a perfect food; but a diet consisting of dairy products, leafy vegetables, fruits, meats and easily digested starches furnishes an excess of all food factors necessary for proper growth and nutrition and resistance to disease.

3. Any variation from a normal diet should be prescribed only by a properly trained physician after a careful study of the dietary requirements of the individual seeking advice.

SALES TAX.

Whereas, industries, professions and governments are keenly feeling the financial stress of these hazardous times, and all forces are being brought to bear to restore confidence in private and public relations, a trust, so essential to the well-being of all, and

Whereas, our altered circumstances and the urgency of balancing the budget, both public and private, call for heroic measures, and

Whereas, recognizing the fact that a fundamental perogative of Government is its power of taxation, still the fact remains that such taxation should be just, equitable and non-discriminating, and

Whereas, the medical profession has nothing to sell except its services to the needy, regardless of whether the purchaser is able to pay for such services, yet at all times the medical profession stands ready to give of its time, labor and thought, never questioning ones' ability to pay, rather considering the opportunity to serve those who need their care, in this respect differing from other classes of people, prominent in our civic life, namely, the banker, the school teach and governmental employee, who demands and receives his compensation, and

Whereas, in the proposed Sales Tax, now under consideration by the Mississippi State Legislature, the clause referable to those, who pay a privilege tax, and this includes the medical profession, would work an injustice to and impose a discriminating burden upon an already heavily laden medical profession, therefore,

Be it resolved by the House of Delegates of the Mississippi State Medical Association, in annual session in Jackson, Mississippi, this fourteenth day of April 1932, that the enactment of the clause of the proposed Sales Tax as now written relative to physicians and surgeons would work an unwarranted burden on the medical profession, and that the Mississippi State Legislature is hereby respectfully petitioned to exempt the medical profession from the operation of the aforesaid law for the reasons as set out above.

Be is resolved further that if the legislature will place this tax on others equally or better able to pay, such as all state and county and municipal officials, such as heads of public schools, bankers, etc., that we the medical profession will gladly concur and endorse the proposed tax.

HONORARY MEMBERS.

The following were elected to honorary membership in the Mississippi State Medical Association at its recent meeting:

W. G. Kiger, Brunswick, proposed by the Issaquena-Sharkey-Warren Counties Medical Society.

J. T. Butler, Brookhaven, proposed by the Tri-County Medical Society.

Dr. Kiger is the oldest living past president of the association in point of service, he having held office for the year 1892-93.

PROPOSED CHANGES IN LAW RELATING TO PHYSICIANS IN CIVIL ACTIONS.

A licensed physician or surgeon can not, without the consent of his patient, be examined in a civil action as to any information acquired in attending the patient, which was necessary to enable him to prescribe or act for the patient; provided, that where any person brings an action to recover damages for personal injuries, such action shall be deemed to constitute a consent

by the person bringing such action that any physician who has prescribed for or treated said person and whose testimony is material in said action shall testify.

When negligence and incompetence on the part of the plaintiffs' physician is charged, plaintiff shall be required to show wherein such physician was negligent, and the physician shall be permitted to take the stand in his own behalf.

Referred to the Committee on Public Policy and Legislation.

GREETINGS.

To the Mississippi State Medical Association from the Mississippi State Hospital Association.

GREETINGS.

Resolution: Whereas, the Mississippi State Hospital Association in session assembled April 11, 1932 did enjoy the fellowship, the cooperation, privileges and benefits of meeting with and at the time of the Mississippi State Medical Association, and

Whereas, we are cognizant of the benefits and privileges of a joint meeting,

Therefore, be it resolved that the Mississippi State Hospital Association does hereby extend to the Mississippi State Medical Association its expressions of thanks and gratitude for the courtesies of this valuable contact and convey to them our sincere appreciation and pledge to them our unfaltering loyalty, cooperation and best efforts in our future endeavors to improve the Hospitals for the Doctors, Patients, and Nurses of the State of Mississippi.

J. Gould Gardner, President.
V. B. Philpot,
W. H. Frizell, Committee.

MISSISSIPPI STATE MEDICAL ASSOCIATION.
IN MEMORIAM.

George W. Barlow, Lake; May 14, 1931; age 63.

D. P. Butler, McCall Creek; January 13, 1932; age 61.

L. D. Dickerson, McComb; June 4, 1931; age 62.

J. A. Dilworth, Aberdeen; November 12, 1931; age 70.

William T. Duke, Glen Allen; July 23, 1931; age 41.

W. G. Gill, Newton; August 20, 1931; age 49.

L. L. Greer, McComb; July 11, 1931; age 50.

T. A. Heath, Shiloh; January 18, 1932; age 75.

J. W. Henderson, Clarksdale; September 10, 1931; age 54.

R. E. Higdon, Brookhaven; January 24, 1932; age 59.

D. R. Lamb, Artesia; May 25, 1931; age 51.

E. C. Lucas, Ebenezer; January 9, 1932, age 71.

W. B. Martin, Indianola; November 23, 1931; age 73.

G. D. Mason, Lumberton; April 26, 1931; age 43.

V. W. Maxwell, Gulfport; June 26, 1931; age 40.

G. A. McHenry, McHenry; October 12, 1931.

J. B. Sims, Aberdeen; May 10, 1931; age 70.

W. W. Smithson, Jackson; September 9, 1931; age 56.

J. C. Vandiver, Baldwyn; June 9, 1931; age 48.

I. T. Woodruff, Batesville; July 11, 1931; age 60.

CANCER CONTROL.

Note—Relative to procedure before "The Proposed Five Year Program of Cancer Control" can be put into operation:

1. The final decision as to the desirability of the Medical Profession of Mississippi, not only becoming identified with, but in fact leaders of the Cancer Control Program rests with the State Medical Society.

The Mississippi Cancer Commission, composed of Doctors Underwood, Shands, and Cranford appointed by the Governor to study and report on the cancer problem in Mississippi are members of the State Medical Society. It is their earnest desire to carry out the expressed wishes of this Society.

To this end, The Cancer Commission of Mississippi submits through the Cancer Committee of the State Medical Society the following "Proposed Five Year Pogram of Cancer Control," and respectively requests such changes and modifications as may be considered advisable by the State Medical Society.

1st Endorsement:

The Cancer Committee of the State Medical Society as represented by the following members have considered the "Proposed Five Year Program." After making certain modifications of the original program, this Committee recommends it for approval:

Modifications and Changes Recommended:

2nd Endorsement:

Approval, modification or disapproval by the President of the State Medical Society.

3rd Endorsement:

Approval, modification or disapproval by the incoming President.

4th Endorsement:

Approval, modification or disapproval by Dr. Mull.

5th Endorsement:

Approval, modification or disapproval by Secretary of State Medical Society.

6th Endorsement:

Approval, modification or disapproval by the Councilors of State Medical Society.

2. The Cancer Committee of the State Medical Society should be more or less permanent in character.

A portion of its membership should be appointed each year for a period of five years in order that the experience and efficiency of the Committee be not impaired.

PROPOSED FIVE YEAR PROGRAM FOR CANCER CONTROL.

I. Chairman of Cancer Committee of State Medical Society.

Outline of Activities of Committee:

(A) Medical approach:

1. Stimulate interest in cancer program among physicians through:

a. Distributing medical abstracts and reprints.

b. Publishing articles in medical journals on cancer sending out reprints on request.

c. Arranging cancer programs for state medical society meetings, also district and county.

d. Arranging cancer symposiums and clinic demonstrations.

e. Encouraging greater emphasis on cancer in medical school courses.

f. Having questions on cancer inserted in medical examinations.

g. Showing cancer films in medical groups and loaning same to doctors.

h. Assembling good slide collection and loaning same.

2. Encourage the establishment of clinics in general hospitals through:

a. Cooperation with hospital authorities. Refer to A. S. C. S. booklets and standards. Aiding in reorganization of hospital facilities and staff in order to establish clinic. Help in raising funds for equipment, etc.

b. Clinic demonstrations in cooperation with hospitals.

3. Encourage the improvement of existing facilities through:

a. Writing articles in medical journals calling attention to needs.

b. Stimulating gifts of money for radium, new equipment, etc.

c. Appeal to legislature for funds.

4. Encourage postgraduate work among physicians through:

a. Short courses in clinics on various phases of cancer therapy (Bloodgood type. Refer to his experience and program).

b. Offer scholarships and fellowships to outstanding men.

c. Offer prizes to interns for best work in cancer.

5. Stimulate interest in nursing groups in cancer through:

a. Distributing booklets on cancer to graduating nurses.

b. Articles in nursing magazines.

c. Distributing reprints on cancer.

d. Securing greater emphasis on cancer in nurses training courses.

e. Having questions on cancer inserted in examination questions for nursing diplomas.

(B) Medical and lay approach.

1. Appoint speakers bureau with services of lectures for lay groups and medical groups alike.

a. Radio talks by physicians.

(C) General Duties.

1. Appoint local, county and district representatives.

2. Approach dentists through:

a. Meetings.

b. Distribution of abstracts and reprints and booklets.

c. Articles in dental journals.

3. Stimulation of adequate pathological service for physicians and hospitals.

II. State Health Officer.

Outline of Activities:

(A) Stimulate interest in cancer among health officials and workers by:

1. Distribution of statistical material to health officials.

2. Articles in state and city health bulletins.

3. Conferences of health officers.

4. Distribution of reprints on cancer.

5. Invitation of health officers to attend clinical demonstrations and symposiums.

6. Distribution of lectures for use of public health officers.

7. Distribution of booklet, "What Public Health Officials Can Do About Cancer." (A. P. H. A., rewritten.)

(B) Stimulate interest in securing cancer morbidity law. Cancer a reportable disease.

1. Distribution of information as to incidence of cancer mortality and morbidity, economic loss, etc. Distribution of reprints on need for reporting cancer. Articles in health bulletins on difficulty of accurate statistics.

(C) Extension of state nursing service.

1. Check up contents of nurses training courses.

2. Include questions on cancer in examinations.

(D) Cooperate with state medical society chairman and A. S. C. C. man.

1. From joint speakers bureau, services for lay and medical groups.

(E) Appoint local representative in each city and county and

1. Distribute literature, posters, etc. to him with instructions and prepared lectures, news releases, etc.

(F) Actively engage in lay education in cooperation with A: S. C. C. Representative through:

1. Radio talks.
2. Lectures.
3. Distribution of booklets and bulletins.
4. Films, etc., etc.

III. A. S. C. C. State Chairman.

Outline of Activities:

(A) Stimulate interest in cancer among laity and medical groups in cooperation with other tripartite members especially in local places. This through:

1. Lectures to clubs, civic organizations, factories and industrial plants, large groups of workers, dentists, nurses, teachers, etc.
2. Distribution of literature sent from home office.
3. Acting as general information bureau.
4. Distribution of medical reprints and abstracts.
5. Cooperation with others in exhibits and speakers bureau.

(B) Cooperation with I and II.

(C) Yearly report of activities.

(D) Appoint local representative in each county and city whose duty shall be to cooperate with the representative appointed by the State Health Officer and by the Chairman of the Cancer Committee of the State Medical Society. This nucleus of three to carry into effect locally the program adopted by the State tri-partite group.

(E) It is definitely understood by the A. S. C. C. that cancer control is a problem of the Medical Profession of Mississippi and that the activities of the National Society will be limited to those delegated to it by the State Medical Society.

Recommendation:

That the cancer control program for the first year or two be limited to activities within the medical profession.

WOMEN'S AUXILIARY OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION.

The Women's Auxiliary of the Mississippi State Medical Association has just closed a very successful meeting held in Jackson, at the Robert E. Lee Hotel.

Tuesday was given over to meetings of the Executive Board and the various committees, with a reception and dance in the roof garden of the Robert E. Lee Hotel to the members of the Auxiliary and Medical Association after the general meeting on Tuesday night with the Central Medical Society and its Auxiliary as the host and hostess groups.

On Wednesday morning in addition to the regular order of business the Auxiliary was addressed by Dr. J. C. Culley, and Dr. J. M. Acker, president and president-elect of the Medical Association, also Dr. W. W. Crawford of Hattiesburg.

Mrs. Charles E. Oats was honor guest at the luncheon at the University Club given the Auxiliary members by the Auxiliary of the Central Medical Society. Mrs. James Franklin and Mrs. T. W. Woodward, both outstanding members of local musical circles, presented a series of voice and piano numbers for the occasion, at which Mrs. Adna G. Wilde graciously presided.

A most delightful tea was given to members of the Central and State Auxiliaries by Mrs. W. B. Dobson in her beautiful home.

Thursday morning was given to routine business which resulted in the adoption of a resolution for the appointment of a Jane Todd Crawford committee to co-operate with the committee for the same cause of the Auxiliary of the A. M. A. The following officers were elected:

President—Mrs. W. C. Pool, Cary, Miss. This was necessary because of the much regretted resignation of Mrs. Henry Boswell, president-elect.

President-elect—Mrs. F. L. Van Alstine, Jackson, Miss.

First Vice-President—Mrs. J. M. Acker, Jr., Aberdeen, Miss.

Second Vice-President—Mrs. Henry Boswell, Sanitorium, Miss.

Third Vice-President — Mrs. Ledoy Wilkins, Clarksdale, Miss.

Fourth Vice-President—Mrs. Estes Blount, Bassfield, Miss.

Recording Secretary—Mrs. Adna G. Wilde, Jackson, Miss.

Parliamentarian—Mrs. D. J. Williams, Gulfport, Miss.

Historian—Mrs. M. H. Bell, Vicksburg, Miss.

Councilors—First district, Mrs. H. L. Cockerham, Gunnison, Miss.; second district, Mrs. J. C. Culley Oxford, Miss.; third district, Mrs. D. E. Staton, Columbus, Miss.; fourth district, Mrs. W. H. Curry, Eupora, Miss.; fifth district, Mrs. J. A. K. Birchett, Jr., Vicksburg, Miss.; sixth district, Mrs. W. S. Gill, Newton, Miss.; seventh district, Mrs. L. L. Polk, Purvis, Miss.; eighth district, Mrs. L. O. Gaudet, Natchez, Miss.; ninth district, Dr. Emma Gay, Gulfport, Miss.

Mrs. F. L. Van Alstine.

MISSISSIPPI STATE HOSPITAL ASSOCIATION.

The fourth annual session of the Mississippi State Hospital Association was held at the Edwards Hotel, Jackson, on Monday, April 11, with an attendance of seventy. Dr. Leon S. Lippincott, Vicksburg, presided as president.

The report of the Secretary-Treasurer, Dr. C. M. Speck, New Albany, showed an institutional membership of 46 hospitals.

The committee reports were received as follows:

Committee on Charity Hospitals, Dr. B. B. Martin, Vicksburg, chairman; Committee on Co-operative Buying, W. Hamilton Crawford, Hattiesburg, chairman; Committee on Collection of Accounts, G. D. Stanley, Greenville, chairman, by W. Hamilton Crawford; on Constitution and Rules, Dr. J. S. Ullman, Natchez, chairman; Committee on Community Hospitals of the Mississippi State Medical Association, Dr. V. B. Philpot, Houston, chairman; the Committee on Legislation, Dr. W. W. Crawford, Hattiesburg, chairman, by W. Hamilton Crawford.

Papers and discussions:

PERSONNEL.

Should the Salary and Labor Scale be Reduced?

(a) If So, How Can the Hospital be Assured of Efficiency?

Speaker, Dr. W. J. Anderson, Meridian.

Discussion opened by H. Ogden, Hattiesburg.

REVENUE.

Should Hospital Rates be Reduced to Meet the Present Economic Conditions?

Speaker, Dr. J. Gould Gardner, Columbia.

Discussion opened by Dr. W. H. Frizell, Brookhaven.

Reduced Production Cost Affected by New Economics.

Speaker, Dr. John C. Culley, Oxford.

Discussion opened by Dr. J. A. Rayburn, Natchez.

What Are We Doing to Increase Our Collection Efficiency?

Speaker, Mrs. Karenza Gilfoy, Jackson.

Discussion opened by Rev. Wayne Alliston, Jackson.

The Future of the Training School in Mississippi.

Speaker, Miss Mary H. Trigg, R. N., Greenwood.

Discussion opened by Miss Mary E. Dorsay, R. N., Greenville.

As recommended by the President, a Committee on Minimum Standards and a Committee on Nurses and Nursing were authorized. The publication of a quarterly bulletin was decided upon.

Dr. W. C. Walker of Houlka was unanimously elected an honorary member of the Association.

The incoming President was authorized to attend the joint meeting of the State Hospital Associations of Tennessee, Arkansas and Kentucky, at Memphis, on April 18 and 19.

The incoming Vice-President was authorized to attend the meeting of the State Hospital Association officers at the headquarters of the American Hospital Association, in February, as representative of this Association.

The election of officers for the year of 1932-33 resulted as follows:

President—Dr. J. Gould Gardner, Columbia.

Vice-President—Dr. R. J. Field, Centreville.

Secretary-Treasurer—Dr. Leon S. Lippincott, Vicksburg.

Members of the Board of Directors—Dr. John C. Culley, Oxford; Dr. V. B. Philpot, Houston.

The annual banquet was held in the evening at 6:45 o'clock, with Dr. Felix J. Underwood, Jackson, toastmaster.

The address of the evening "How to Be Saved," was delivered by Mr. Will Ross, Milwaukee, Wisconsin.

Other speakers were Dr. W. S. Leathers, Dean of Vanderbilt University, School of Medicine, Nashville, Tennessee, and Dr. John C. Culley, Oxford, President of the Mississippi State Medical Association. Dr. Culley introduced the new President, Dr. J. Gould Gardner.

Dr. Gardner asked for support and pledged best efforts in making the coming year the Association's best.

The next meeting of the Association will be held in conjunction with the meeting of the Mississppi State Medical Association, at Jackson, on Monday, April 10, 1933.

MISSISSIPPI STATE HOSPITAL ASSOCIATION ANNUAL MEETING, APRIL 11, 1932, JACKSON, MISSISSIPPI.

PRESIDENT'S ADDRESS.

This annual meeting marks the close of my official relations with this Association. I am grateful for the confidence you have imposed in me, and to Dr. Speck, our Secretary, to Mr. Crawford, the young father of this Association, and to all of you who have given splendid assistance and co-operation. My connection however, with the affairs of the Association, I shall hope to continue, for I am convinced that this organization can do much for the people of Mississippi as well as for our hospitals.

Your committee has prepared for you a program of worthwhile topics, to be presented by those who know. We sincerely trust that you will all enter into the spirit of service which the subjects suggest and join in the discussions, with the same interest your speakers have shown in the preparation of their papers. We all have our problems. Many of them are similar. Some of us may have solved them better than others. It is our opportunity to give and receive. This

is my special invitation to each one of you to avail yourself of the privileges of the floor which are cordially extended.

Early in our Association year we were saddened and handicapped by the loss of an earnest worker and one whom we had expected to lead us in the year to come—our Vice-President, Dr. L. D. Dickerson of McComb, who died on June 4, 1931. I ask that you stand for a minute of silent prayer in his memory.

During the past year, we believe the Association has made some progress in several directions. First and foremost we have been able to enlist in our cause 23 hospitals not before affiliated. From an institutional membership of 21 at our last meeting, we have now 44. There are 76 hospitals in Mississippi listed in the directory of the American Medical Association; several hospitals are not listed. Of the 76, eight are listed under the classification of "nursing home, school or prison infirmary, or other institution giving some medical, nursing or convalescent care in an ethical and acceptable manner, but not strictly a hospital." None of these have seen fit to become members of our Association. There are five state institutions other than charity hospitals, none of which have enrolled, mostly, as explained by their heads, because their boards would not allow the membership dues. There are five state charity hospitals, two of which are members. There is one United States Veterans' Hospital, which has replied to no correspondence. There are two negro hospitals.

Mississippi hospitals are, in general, comparatively small institutions. Only 10 have more than 100 beds, and those are all State or Government institutions. There are 19 hospitals with less than 25 beds, of which seven are members of the Association. Some of these smaller hospitals have told me frankly that they could not pay the $10.00 membership dues. To be of most service the Association should have enrolled every hospital in the State. Any good that is accomplished brings benefits to all hospitals. All hospitals should have a part in its work. I am wondering if it would not be well to make the dues of hospitals of less than 25 beds $5.00 a year instead of $10.00, and I submit the thought for your consideration.

PERSONAL MEMBERSHIP.

It is the opinion of your President that in the coming year a drive should be made to interest and enroll besides institutional members, personal, active and associate members. These could include many persons directly or indirectly interested in hospitals and would give strength as well as bring in more funds with which to work.

CONSTITUTION AND BY-LAWS.

We found early in the year that our present Constitution and By-Laws were not specific and were inadequate. Your Committee on Constitution and Rules will recommend at this session numerous changes for your consideration and approval. The suggested changes are in conformity with the Constitution and By-Laws of the American Hospital Association

MINIMUM STANDARDS.

Last year, I recommended a minimum standard for institutional membership in this Association. Again, I wish to urge the adoption of such a standard. Membership in this Association should be a badge of merit and a guarantee of good standing. Such a standard would add much to the prestige of the organization. A more or less elastic routine of high standards of operation and service will make itself known and felt throughout the state to the extent that even the poorest hospital will begin to follow the examples set or be forced out of business.

JOINT MEETINGS.

A joint meeting of the Tennessee, Arkansas, and Kentucky Hospital Association will be held in Memphis, Tennessee, on April 18 and 19. This Association was kindly invited to meet with them in place of our meeting today. It was our opinion that while such a joint meeting would be interesting and valuable to those who attended, it was probably better not to attempt it this year. We had agreed at the invitation of the Mississippi State Medical Association to hold our meeting this year on the day preceding the first day of the meeting of the Medical Association in order to avoid conflict and with the idea that we would get larger attendance than if we met at another time. If our meeting was held in Memphis, it would mean two trips for the doctors who attend the two meetings and under the present conditions it seemed very doubtful if we could secure a representative attendance. In my opinion the cordial relations now existing between the Mississippi State Medical Association and our Association are a great asset. Many of our hospitals are owned or conducted by doctors. All are used by doctors. We need each other.

We are now asked to send a representative to the joint meeting at Memphis. There is a movement to co-ordinate effort and perhaps revive the Southern Hospital Association. Your Board of Directors is in favor of sending a representative this year, and it should probably be your incoming President.

MEETING OF STATE HOSPITAL ASSOCIATION PRESIDENTS.

On February 15 to 17, your President, at the invitation of the American Hospital Association and of the American Medical Association, and with the permission of our Board of Directors, attended the meeting of the Presidents of State Hospital Associations and the annual meeting of the Council on Medical Education and Hospitals of the American Medical Association at Chicago.

The meeting of State Hospital Association Presidents was the first in the history of the American Hospital Association, and was decided upon at the Toronto meeting last fall on motion of our own Hamilton Crawford. It was attended by thirty representatives of hospital associates and groups and was so successful that all present were of the opinion that such a meeting should be held annually.

Much of the time of both groups was devoted to discussion of advisability of utilizing existing civilian hospital facilities for veterans rather than building further government hospitals. Representatives of the American Medical Association, including Secretary of the Interior, Dr. Ray Lyman Wilbur, the American Hospital Association, and the American Legion are working together and seem in accord in an attempt to work out a plan acceptable and to the best interests of all concerned. It is especially gratifying to us as hospital people that Mr. Paul H. Fesler, president of the American Hospital Association, has been chosen general chairman of the representative committee of the three organizations.

Such meetings give a broad outlook on hospital affairs in general and are well worth while. It is my recommendationn that this association be represented at such meetings in the future, the representatives to be the vice-president of the Association.

NATIONAL HOSPITAL DAY.

For more than ten years, a National Hospital Day has been observed in many parts of the United States. So far as I know, little has been heretofore done in Mississippi to recognize this day which has meant much in understanding the good will to many institutions. May 12 is the day set for this year and every hospital is urged by the American Hospital Association to have a part in informing the public on that day of hospital problems, and aims and objects. Much has been said in recent months of the high costs of hospital care. To us who know something of the overhead expense of conducting a modern hospital, some of the statements published have seemed unfair. In the minds of some people, all hospitals are making their owners and all connected with them rich. Usually if people can be shown the facts, there comes understanding. National Hospital Day gives us that opportunity. Some of us may have hesitated to take part in the observance of this day for fear of being accused of advertising and unethical conduct. I hope that this association may allay that fear by going on record as approving plans as suggested by the American Hospital Association and urging its members to have an active part this year.

FINANCING THE ASSOCIATION.

The usefulness of our Association could be greatly extended if it had a larger income upon which to count from year to year. The income from present sources does not permit of great expansion. The great amount of good which this Association could accomplish by aiding all the hospitals of the State and thus indirectly all the patients who enter our institutions, creates a poossibility of rendering a real service to many people. If we can develop and offer to the hospital people of Mississippi a program that can demonstrate its usefulness, and at the same time give assurance that whatever funds are contributed will be properly administered, there will be few hospitals that cannot be interested. It is even conceivable that private philanthropy might see in this Association a desirable means of benefiting our State. Our best immediate opportunity is to make a great effort in the year to come to interest in membership not only hospitals but also members of board of trustees, members of the medical staffs of hospitals, the heads of executive, administrative and educational departments of hospitals, and contributors to or members of associations and boards having to do with the foundation, maintenance or improvement of hospitals or the promotion of organized charities for the improvement of health. All are eligible to active or associate personal membership. There is strength in numbers and the greater the membership the more general interest in the Association. Incidentally, dues for such membership, while small, will aid.

OFFICIAL PUBLICATION.

It has been the purpose of the Association since its inception to have an official publication to keep all members informed and interested. This should be issued at least quarterly, but preferably monthly. During the past year, your president has endeavored in some measure to meet this need by letters to members. At least eight such general letters have been sent out in addition to much correspondence. Space has also been given to Association matters in the New Orleans Medical and Surgical Journal.

It is my hope that in the coming year a definite publication policy may be inaugurated. An interested member is one who knows what is going on. Because of cost, a printed publication of our own may not be possible. If not, a regular mimeographed letter would do very well. The New Orleans Medical and Surgical Journal goes each month to each member of the Mississippi State Medical Association, and hence, probably to every hospital in the State. As editor for Mississippi, I see no reason why a page each month should not be devoted to this Association as hospital news.

NURSING.

Inseparable from the work and development of our hospitals is the nurse. There has been a great tendency, especially in recent years, to add to the

curriculum of our schools of nursing until in the opinion of many the courses in general education insisted upon are crowding out the essentials upon which the nursing profession was founded. Some of the institutions of the country feel that a Ph.D. degree is necessary. If the present tendency is extended, it is not difficult to see that in the not distant future there will be no one humble enough to do the actual nursing necessary to the recovery of patients. Most of our hospitals in Mississippi have less than 100 beds each. Many of them are in rural districts. The need for nurses is just as great in our hospitals as in Chicago or New York or Philadelphia, but the facilities for training them are much less extensive. Let us pick our student nurses because of their love of the work and the good they may do, nurses who are willing to give of themselves, nurses who will bring comfort and joy to our sick; let us not try to give them a general education in all the arts and sciences.

I recommend the appointment of a sympathetic committee that will make a study of the whole nursing problem in Mississippi, that will contact the State Board of Nursing Examiners, and that will work to bring about a satisfactory plan for the supplying of necessary service to our hospitals. We are more directly interested than any other body in the State with the exception of the nurses themselves. Nurses are made by the hospitals. Neither can stand alone.

Just a word in closing on the economic conditions with which we are faced. Many of our beds are unoccupied and many of us are wondering how we are to survive. But we all know that sooner or later prosperous times will again be with us. Such periods of trial are not without value. They teach us sober judgment. Calvin Coolidge has said, "The scraping of the hull of a ship of state is a trying ordeal for the barnacles." We shall all be better hospital administrators for the experience.

In a little country town in Arkansas it had been raining for a week. In a little country store sat an old man, whittling. A visitor approached Said he, "It looks as if it was going to clear." Said the old man, without looking up "It always has."

Leon S. Lippincott.

TO THE MISSISSIPPI STATE HOSPITAL ASSOCIATION.

Whereas, it has pleased the Supreme Architect of the Universe to remove from the earthly sphere of his activities the Mississippi State Hospital Association's honored Vice-President, Dr. L D.. Dickerson; and,

Whereas, his untimely demise has brought sincere sorrow into the ranks of this Association and cut short his construction work begun;

Resolved that we express our sorrow and regrets, that we emulate his example of loyalty to his profession and ideals, and his charitable spirit, that we revere his memory; and, further

That a copy of these resolutions be spread upon the minutes of this meeting, and a copy sent to the family of our departed brother.

Na cause based upon the care of the sick can ever be checked by financial depressions or business failures. A calling as old as the art of healing is the work of God; it will go on through the ages. It is for us to give to our work the best that is in us—to see that we pass on to those who follow us better hospitals.

W. H. Frizell,
M. D. Ratcliffe,
J. K. Avent,
Committee.

April 11, 1932.

ALCORN COUNTY.

Dr. M. H. McRae is again attending to his practice following an appendix operation last month.

Dr. J. A. Borroum, Memphis Hospital Medical College, class of 1894, died suddenly at his home in Corinth on April 2, 1932, of angina pectoris, aged 60 years. He practiced medicine only a few years. For the past thirty-five years he had devoted his full time to his drug business.

Mrs. C. F. Gilbert is singing over radio station W. M. C., Memphis, Tennessee, 15 minutes after 2 p. m. every other Saturday.

Mrs. J. R. Lanning is reported much improved after an extended visit to Dawson Springs, Kentucky. She expects to return April 14.

W. A. Jones, County Editor.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY.

The April meeting of the Harrison-Stone-Harcock Counties Medical Society was held at the Biloxi Hospital, Wednesday, April 6, at 7:30 p. m. The scientific program included the following:

The Refraction Patient—Dr. W. A. Stevens.

Guests of the society were Dr. John B. Culley, President of the Mississippi State Medical Association, and Dr. Felix J. Underwood, Executive officer of the Mississippi State Board of Health.

Dr. C. M. Shipp, Bay St. Louis, is President of the society, and Dr. E. A. Trudeau, Biloxi, is secretary.

LEFLORE COUNTY.

We are glad to report that Dr. George Baskervill has recovered sufficiently to resume his practice after a month's illness. He was confined to the Greenwood-Leflore Hospital about 10 days with a severe streptococcic septicaemia following an ap-

parently trivial superficial abrasion on right hand as the original focum.

Dr. W. D. Wilson, Schlater, is happy over the arrival of his first grandson, W. D. Wilson, III, on April 3, 1932, at the Greenwood-Leflore Hospital.

W. B. Dickins County Editor.

COMMUNICABLE DISEASES.

For the month of February, 1932, the Bureau of Communicable Diseases of the Mississippi State Board of Health reports typhoid fever 32, smallpox 119, diphtheria 71, scarlet fever 42, pellagra 289, tuberculosis 97, per cent of physicians reporting, 98.7.

WEBSTER COUNTY.

The Winona District Medical society will meet at Ackermann sometime in May. The date and program will be announced later.

The roads to Ackerman are good and we are expecting a splendid attendance, and most especially so since the ladies of the churches have planned to give us a banquet.

Dr. J. D. Turner of Tupelo has moved to Eupora to take up the practice of medicine. To the surprise of the young folks he married Miss Helen Keirle of Bunker Hill, Illinois, on March 28.

Congratulations and the best of wishes for this young couple.

W. H. Curry, County Editor.

WINSTON COUNTY.

Dr. T. F. Kilpatrick is a member of the Government Feed Loan Committee and is doing some fine business.

Dr. H. B. Watkins made a business trip to Jackson this week.

Dr. W. W. Parks has been out of town. Not knowing where he was, we assumed he was out on a fishing excursion.

Dr. E. L. Richardson reports that times are too hard to get away from home at all, and it is an expense to stay at home.

We all hope that the legislature will balance the budget and et us see what will happen then.

We are fearful that the Charity Hospitals in Mississippi will be in a critical condition, snce there will be so few that can be treated in pay hospitals in the near future.

M. L. Montgomery, County Editor.

PONTOTOC COUNTY.

News very scarce in this county.

Still have some smallpox. Have vaccinated about 1500, with a large percentage of takes.

Several of our doctors attended the staff meeting of the Houston Hospital and enjoyed an excellent paper by Dr. W. C. Walker of Houlka.

The next staff meeting will be the latter part of April.

Several of our doctors attended the meeting of the Mississippi State Medical Association at Jackson.

Tupelo Hospital is taking advantage of the dull times and is repairing the building.

Will see you again next month.

R. P. Donaldson, County Editor.

EAST MISSISSIPPI MEDICAL SOCIETY.

The East Mississippi Medical Society met on the mezzanine floor of the Lamar Hotel, Meridian, Thursday, April 21, at 3 p. m.

The program as announced by Dr. T. L. Bennett Secretary, was as follows:

1. Injection Treatment of Hemorrhoids—Dr. W. B. Hickman, Louisville. Discussed by Drs. H. M. Robinson and R. G. Hand.

2. Meningitis.—Dr. D. L. Walker, Meridian. Discussed by Drs. T. D. Boudreaux and J. L. Parkes.

3. Aschalasia of the Esophagus, with Presentation of Two Successfully Treated Cases.—Dr. Sidney K. Simon, New Orleans, Louisiana. Discussed by Drs. W. J. Coleman and H. L. Arnold.

PIKE COUNTY MEDICAL SOCIETY.

The Pike County Medical Society held its first "Clinical Day" program in McComb on March 3. This took the place of the regular monthly meeting.

Dr. Charles Bloom of New Orleans was our guest-speaker and in the afternoon held a most interesting pediatric clinic. A large variety of cases was presented by Dr. Bloom at the afternoon session, which proved to be most instructive to all present.

At the McColgan Hotel that evening after supper Dr. Bloom addressed an attentive crowd, speaking on "Respiratory Infections." This subject was covered in his usual thorough fashion.

Those present at the evening meeting were: Drs. T. B. Abney, H. L. Bauer, L. W. Brock, R. H. Brumfield, W. F. Cotton, A. J. Fortenberry, E. M. Givens, T. Paul Haney, H. C. Hatcher, B. J. Huey, J. E. Hewitt, L. E. Hewitt, S. Paul Klotz, Thomas Purser, G. W. Robertson, Elise Rutledge, L. J. Rutledge, M. D. Ratcliff and Charles Bloom.

Before the meeting adjourned Dr. Bloom spoke of the work he is doing with dicalcium phosphate in rickets.

Pike county is lucky in having Dr. Bloom as its guest and the society will long remember his visit.

H. C. Hatcher, Secretary.

PIKE COUNTY.

The officers for Pike County Medical Society

for 1932 are: Dr. W. O. Biggs, Osyka, President; Dr. M. D. Ratcliff, McComb, Vice-President; Dr. H. C. Hatcher McComb, Secretary-Treasurer; Dr. T. Paul Haney was elected social editor.

Drs. L. W. Brock and E. M. Givens of McComb, T. E. Hewitt of Summit and W. S. Lampton of Magnolia, returned to their respective homes about February 15 to resume practice following their post-graduate work, which was done at Tulane University.

Drs. W. C. Hart of McComb and J. E. Brumfield and J. M. Smith of Magnolia are now in Tulane taking post-graduate work. All of these men have been favored with scholarships by the Commonwealth Fund of New York.

The Pike County Medical Society plans on having a series of "clinical day" programs during 1932, the programs to be presented by outstanding men in medicine. The first program was held March 3, and Dr. Charles Bloom of New Orleans was the speaker. He easily won the hearts of all listeners and shall be remembered in these parts for many moons. The society was favored at this program with many physicians from adjoining counties.

The next "clinical day" program will be held April 15, at which time Dr. James G. Carr of Chicago, Professor of Internal Medicine at Northwestern University School of Medicine, will be with us.

Many of our county physicians expect to attend the State Medical meeting in Jackson this month.

T. Paul Haney, Editor,
per H. C. Hatcher.

CLAY COUNTY.

Since sending you report of medical news items last month, there have been only two or three additional cases of smallpox reported in Clay county and a total of 1750 vaccinated to date.

Mrs. Oliver Johnson of Dayton, Ohio, and Miss Elizabeth Deanes of Birmingham, Alabama, are visiting their mother Mrs. S. R. Deanes, who is in the local hospital here, after having fallen and sustained an intracapsular fracture of the hip some four weeks ago. Following the accident, Mrs. Deanes developed a hypostatic pneumonia and was very ill for a short time. She is now reported on the road to recovery.

Miss Margaret Dotson, who is teaching in Hernando, spent the Easter holidays with her parents, Dr. and Mrs. Lon W. Dotson. She was accompanied by Dr. C. W. Emerson, also of that city.

It seems that I am unable to gather any news items from the doctors of this county just now, as they are either too busy in their practice or fishing. Maybe something of interest next month.

Lon W. Dotson, County Editor.

WOMEN'S AUXILIARY OF THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY.

So successful was the recent meeting of the Women's Auxiliary of the Issaquena-Sharkey-Warren Counties Medical Society, with its luncheon innovation held at the Hotel Vicksburg, that it was voted to have a repetition in April. A color scheme of green and white in honor of St. Patrick's Day was used through out the luncheon. Nineteen members were present. A vote of thanks was given to Mrs. M. H. Bell and Mrs. E. F. Howard, who had charge of the arrangements.

Mrs. W. C. Pool, Cary, president, presided. Papers were read by Mrs. E. F. Howard, Vicksburg, on "What the Auxiliary Should Mean to the City Doctors Wife," and by Mrs. A. K. Barrier, Rolling Fork, on "The Life of a Country Doctor's Wife." Mrs. George Street, Vicksburg, added to the pleasure of the occasion by the rendition of several beautiful vocal solos.

Mrs. E. F. Howard and Mrs. L. S. Lippincott were elected delegates and Mrs. F. M. Smith, alternate, to attend the meeting of the Women's Auxiliary of the Mississippi State Medical Association at Jackson.

The Auxiliary is paying for six subscriptions to "Hygiea" for schools. It is desired to correct the item appearing in a recent bulletin of the American Medical Association, stating that the Auxiliary had given $2,500 dollars to the Preventorium Fund and expected to raise $2000.00 more. The Auxiliary has given $25.00 which is given every year.

Mrs. A. Street was elected Program Chairman and asked to select her own committee.

The members of this Auxiliary who are also officers of the Auxiliary of the State Association, and who will attend the meeting in Jackson are Mrs. A. Street, first vice-president; Mrs. W. C. Pool, second vice-president; Mrs. M. H. Bell, historian; Mrs. E. F. Howard, councilor for the fifth district.

Ada R. Bell, Secretary.

MONROE COUNTY.

On Tuesday the fifteenth instant the Northeast Mississippi Thirteen Counties Society held its first quarterly meeting for this year. The meeting was at Booneville and was presided over by our new president, Dr. W. C. Spencer, our society, as well as others, in the state, has been honoring the younger members, but we gave this honor to one of our older members this time. Some one spoke of Dr. Spencer as "the grand old man." He, richly deserves the honor and will reflect honor on us. The meeting was one of our best. The weather was superb, the attend-

ance full, the program good and the interest was keen. We had numerous visitors from other societies as well as some of the leading medical men of the south from outside the state. Dr. John Culley, our most splendid state president, frankly and positively stated that ours is the best society in the state. He said he had reached this conclusion after having visited most of the societies in the state. (May I digress to say that Dr. Culley has done more hard and constructive work for the Association than has any president for a quarter of a century—all honor and praise to John Culley). One notable thing done by our society at his meeting was to go on record, by a unanimous vote, as opposing a resolution that will be presented to the house of delegates at the Jackson meeting in April. This resolution seems to have originated in the Issequena-Sharkey-Warren society. It is apparent that the North Mississippi Seven Counties Society will, also, oppose its passage or adoption.. In my opinion this resolution, if adopted would seriously cripple and handicap the Board of Health. It simply, "must not pass." I am wondering if the depression of spirits and finances will reduce the attendance at the approaching meeting. I, somewhat, fear that it will—especially since the A. M. A. is to follow so soon thereafter.

We have had quite a bit of "flu' in our section of the state during the last few weeks. But since winter seems to be gone and spring seems to have come, let us hope that good health will prevail.

Let us take courage, renew our allegiance to organized medicine, strive harder than ever before to render good and scientific service to our clientele, and cultivate the spirit of goodwill and comradeship to and with our fellows.

On to Jackson and may a good time and good fellowship await each and all of us who go.

G. S. Bryan, County Editor.

JACKSON COUNTY.

The course of lectures given by Dr. James R. McCord of Emory University at Gulfport was well attended by the doctors of Jackson County. One evening all of the doctors of Pascagoula and Moss Point attended, leaving both towns without a doctor for several hours. All were well pleased and felt that they were much benefitted by having attended the lectures and wish to take this means of thanking those responsible for arranging the course.

Dr. R. G. Lander represented the Jackson County Medical Society at the meeting of the State Medical Association at Jackson.

Drs. Lander and McIlwain attended the meeting of the Harrison-Stone-Hancock Counties Medical Society at Biloxi on April 6. Dr. Felix J. Underwood was the principal speaker.

S. B. McIlwain, County Editor.

ADAMS COUNTY.

Several Natchez physicans attended the 65th Annual Session of the Mississippi State Medical Association at Jackson, including Drs. J. W. D. Dicks, J. S. Ullman, L. Wallin, Raymond T. Smith, and J. A. Rayburn.

L. Wallin, County Editor.

SHARKEY COUNTY.

Dr. Robert Foster and family have moved to Illinois. Dr. Foster lived in Anguilla for a few years.

Mrs. B. Goodman, Mobile, Alabama, visited her son Dr. H. S. Goodman at Cary recently.

Mrs. E. B. Stribling of Rolling Fork is visiting her son, Mr. Sam Stribling at Atlanta, Georgia.

Dr. A. K. Barrier, Rolling Fork County Health Officer, has been very busy visiting the schools where he and his splendid co-workers administered typhoid vaccine to the children.

Dr. A. K. Barrier, Rolling Fork and Dr. and Mrs. W. C. Pool, Cary, attended the State Medical Meeting at Jackson. They report a splendid program.

Mrs. M. J. Few, Rolling Fork, is able to be out again after a long illness.

Dr. H. B. Goodman, Vicksburg, spent the day with his parents, Dr. and Mrs. H. S. Goodman, Cary, recently.

W. C. Pool, County Editor.

DEATHS OF MISSISSIPPI PHYSICIANS.

C. W. Smith, Glendora, at Memphis, Tenn., Feb. 23, 1932; Born Torrance, Miss., Dec. 15, 1880.

R. R. Bridges, Crystal Springs; Carcinoma of the prostate gland; at Hazlehurst, R. F. D., Feb. 26, 1932. Born Copiah County, Aug. 13, 1854.

Owne W. Stone, at Army Hospital, Brooklyn, N. Y., Feb. 29, 1932. Born Columbia, Missouri, May 8, 1850.

CALENDAR.

May 2.—Staff of Jackson County Hospital, 7:30 p. m.; Staff of Meridian Sanitarium, 7:30 p. m.; Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.; Staff of George C. Hixon Memorial Hospital, Electric Mills, 8 p. m.

May 3.—Staff of Kings Daughters' Hospital, Brookhaven, 7:30 p. m.

May 4.—Staff of Chamberlain-Rice Hospital, Natchez; Staff of Vicksburg Infirmary, 7 p. m. Staff of Rush's Infirmary, Meridian, 7 p. m.; Staff of Dr. F. G. Riley's Children and Maternity Hos-

pital and Clinic, Meridian, 7 p. m.

May 5.—Pike County Medical Society, McColgan Hotel, McComb, 7 p. m.; McRae Hospital, Corinth, 2 p. m.

May 6.—Natchez Medical Club, 1 p. m.

May 9.—American Medical Association, New Orleans; Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

May 10.—American Medical Association, New Orleans; Staff of Natchez Sanitarium, 7:30 p. m.; Winston County Medical Fraternity, Louisville; Tupelo Hospital, 7:30 p. m.

May 11.—American Medical Association, New Orleans; Staff of Kings Daughters' Hospital, Greenville, 7 p. m.; Harrison-Stone-Hancock Counties Medical Society, 7:30 p. m.

May 12.—American Medical Association, New Orleans; Staff of Aberdeen Hospital, 8 p. m.; Staff of Vicksburg Hospital, 6:30 p. m.

May 13.—American Medical Association, New Orleans; Staff of Anderson Infirmary, Meridian, 7 p. m.

May 16.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.; Staff of Vicksburg Sanitarium, 6:30 p. m.

May 17.—Staff of Natchez Charity Hospital, 8. p. m.; Central Medical Society, Jackson, 7 p. m.; Issaquena-Sharkey-Warren Counties Medical Society, Y. M. C. A., Vicksburg, 7 p. m.

May 20.—Natchez Medical Club, 1 p. m.

May 23.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

May 30.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

HONOR ROLL.

The following contributed to this issue of our Journal: James M. Acker, Jr., T. M. Dye, L. L. Minor, T. J. Brown, W. H. Watson, Jos. E. Green, Daniel J. Williams, D. W. Jones, J. S. Ullman, E. F. Howard, W. A. Johns, F. J. Underwood, W. B. Dickins, W. H. Curry, M. L. Montgomery, R. P. Donaldson, T. L. Bennett, H. C. Hatcher, Lon W. Dotson, Ada R. Bell, G. S. Bryan, S. B. McIllwain, L. Wallin, W. C. Pool, Mrs. F. L. VanAlstine, Lawrence W. Long, R. B. Zeller, F. M. Acree, L. C. Davis—29.

Your editors thank you.

THE PREVENTION AND CONTROL OF VENEREAL DISEASES.—A report of considerable interest recently submitted to Congress by Surgeon General H. S. Cumming deals with the prevention and control of the venereal diseases. During the fiscal year recently ended, the State health officers of 43 States reported to the Public Health Service slightly more than a quarter of a million cases of syphilis and more than 150,000 cases of gonorrhea. These diseases as a class continued to exceed the number of cases reported during the year of any other single communicable disease with the exception of measles.

The malaria treatment of general paralysis of the insane is now generally considered the most effective treatment of this condition. As a result the Public Health Service receives each year an increasing number of requests for infected mosquitoes for inoculation purposes. Plans are now under way to supply this need and to make further studies of this method of treatment in cooperation with various institutions where it is being applied.

Increasing importance is being attached to the early diagnosis and treatment of syphilis. The possibility of extending to rural and remote districts the advantages to be derived from early diagnosis by means of microscopic examination were studied and one method was worked out. This method has been tested by other observers and at present is in operation by one State health department and is under consideration by others.

A special study of syphilis among negroes in rural areas in cooperation with State and local health authorities, inagurated in 1929 with the financial assistance of the Julius Rosenwald Fund, was extended to include areas in five other States. A total of 28,195 negroes were serologically tested, and of this number 5,785, or 20.5 per cent, were found syphilitic on the primary survey. Of these positive cases, approximately 75 per cent were placed on intravenous medication, and at the close of the year 45 per cent of them had received treatment in amount considered sufficient to render them noninfectious. It is unfortunate that the methods used cannot be applied to all classes of population.

A one-day census of the cases of venereal diseases taken in three cities shows marked variation in the relative incidence and prevalence of these diseases as observed in different localities. A resurvey of one entire State and of a number of communities originally studied in 1927 made in order to determine the trend of venereal diseases and the effect of the methods employed for their control during the three-year period, disclosed the significant point that in communities where increases in the prevalence rates were found they occurred in the group of chronic cases, an indication that patients are being treated for a longer time than formerly.—United States Public Health Service.

BOOK REVIEWS

Emergency Surgery: By Hamilton Bailey, F.R.C.S. (Eng.). New York, William Wood & Co. 1931. 2 v.

The author, as stated in the preface of volume 1, has constructed this work "on the teachings of 'his' masters and practical experience," etc. Both volumes are thorough in every detail pertaining to the emergency field, even at times, overstepping into the domain of the specialist.

Vols. 1 and 2, comprising 21 and 20 chapters, respectively, are well and quite profusely illustrated. To discuss each chapter would be too lengthy a task. I shall therefore only try to refer to some statements that may cause comment. In chapter 3, dealing with peritonitis, supra-pubic drainage is preferred regardless of incision. In chapter 4, on Appendicitis, he advocates gridiron incision. The author's statement, "When in doubt, don't drain," is a rule which should not be too dogmatic. He is a great believer in the efficacy of mercurochrome used intravenously in gangrenous appendices, osteomyelitis, pylephlebitis and septicemia from hand infections, a practice which has become obsolete here. In chapter 8, Emergencies of the Upper Abdomen, in treating of ruptured liver, he refers to Pringle's method of controlling hemorrhage with pressure of gastro-hepatic omentum at the foramen of Winslow, the same method used by Duncan Parham in America. When references are made to forms of special technic which are comparatively rare save for a few exceptions, English authors are mentioned. In chapter 10, dealing with spinal anesthesia in intestinal obstruction, the author uses stovaine "in saline and not glucose." The reviewer's experience and that of a few of his colleagues is that in intestinal obstruction, general anesthesia is preferrable to spinal except when using conductive anesthesia of the abdominal wall. This chapter on spinal anesthesia is not up to the standard of the remainder of the book.

In chapter 15, the Lotheissen's operation for the radical cure of femoral hernia, is originally the Annandale technique (1876), Moschowitz (1904), popularized by Seelig Tuholske. The chapters on gastro-intestinal surgery are complete.

Volume 2 deals with the thorax, opening with a discussion on preparedness for emergency by means of general anesthesia. In this chapter the use of operative methods (thoracotomy and lung suture) for hemorrhage of lung caused by trauma is not the teaching in this section. Conservatism, immobilization by strapping the chest, has been the method of choice. Under the same chapter, operative procedures relative to the mediastinum are discussed in a concise manner. The subject of the pharynx and foreign bodies in the upper and lower air passages, as well as nasal accessory sinuses and ear, are discussed by Eric Watson Williams; the Eye and the Orbit are treated by Humphrey Neame, and Teeth by Herman Haines. The close association of these special conditions in surgery and the care shown in bringing in the details are worthy of commendation.

In chapter 31, on blood vessels of the extremities, in the subject of vascular suture and the methods of temporarily occluding an artery, no mention is made of rubber catheter, which is the simplest procedure without causing damage to the endothelial lining of the vessel. In the same chapter the importance of embolectomy on the pulmonary vessels as well as those of the extremities is brought out.

Later, in discussing periosteomyelitis of the fibula alone the author recommends unhesitatingly "diaphysectomy." This seems to the reviewer a little too radical. In discussing the treatment of suppuration in joints, no mention is made of active mobilization (William's), the author preferring irrigation and heavy extension.

Chapter 36 treating of urgent amputation has diverged from the old classical amputations to a select few. Example, amputation of the leg, the 7 inch stump (the modern seal of election), a preference over all other levels. After reading Kanavel's book on Infections of the Hands, chapter 38, should show the vast importance of this branch of surgery. Many other chapter contents could be discussed, but a thorough reading of these two volumes will give one ample field to review his own and add further knowledge to the subject of emergency surgery.

EMILE BLOCH, M. D.

General Medicine (Practical Medicine Series): Ed. by George H. Weaver, M. D., and others. Chicago, Year Book Publishers. 1931. pp. 814.

This is a most useful volume. It is a comprehensive collection of the worth-while literature of the year. The field of general medicine is covered in a well-balanced manner. The brief remarks of editors concerning numerous articles are not the least of the many good features of the book.

I. L. ROBBINS, M. D.

Lehrbuch und Atlas der Spaltlampenmikroskopie des Lebenden Auges: (Textbook and Atlas of Slitlamp Microscopy of the Living Eye.) By Alfred Vogt. Part II, Lens and Zonulla. Berlin, Julius Springer. 1931. pp. 455; 815 illus., 163 pl. Price, 298 marks.

This remarkable book is probably the most complete and elaborately illustrated volume published on an ophthalmic subject. It is the second of a series of three parts presenting the world's knowledge on this interesting and important subject, as presented by Europe's greatest authority.

The first section details the normal lens in its various parts and forms including new ideas on the mechanism of accommodation. Of especial

interest are the beautiful illustrations of the Lameller fibres of Rabi and the congenital sutures. In another fifty pages "Congenital and Developmental Anamolies," are then discussed, followed by Progressive Opacities of Youth and Adolescence.

Under "Affections of the Lens," detailed descriptions and illustrations are presented of rare forms of opacities, such as those associated with myotonic dystrophy, some skin diseases, Horner's syndrome, etc.

In the chapter on "Lens Injuries" the ring opacities of Vossins are shown to be the result of pressure from the iris. Concussion cataract may develop in the lens at least several years after an apparently slight ocular injury. This fact is of importance in medico-legal industrial ophthalmology. Cataracts from copper and steel which has remained in the eyeball for any length of time, are elaborately described and illustrated.

The author's investigations on cataracts produced by luminous energy have brought out new facts which are important in industrial opthalmology. Both heat and light are shown to produce definite and characteristic lens opacities.

The closing chapter is devoted to the anatomy, congenital anomalies, and the effect of injuries on the zonule.

Ophthalmology is indebted to Professor Vogt for this outstanding volume which will probably not be equaled for many years. We are richer because of his talents and apparently inexhaustable energy.

CHAS. A. BAHN, M. D.

Courts and Decisions: By Lloyd Paul Stryker. New York, The Macmillan Co. 1932. pp. 236.

This is an interesting book dealing in the main with medico-legal problems. It is well written and of interest to those not initiated into legal procedures. Several widely discussed verdicts, rendered by our foremost jurists are here cited. Read this book at your leisure.

M. CAMPAGNA, M. D.

Annals of the Pickett-Thomson Research Laboratory: Vol. 7: Under the supervision of Sir Ronald Ross, K. C. B., K. C. M. G., F. R. S. Baltimore, Williams & Wilkins Co. 1931. pp. 411.

Inspiration for the Pickett-Thomson Research Laboratory is Sir Ronald Ross' arhythmic couplet:

Tho' we may not reach the Peak
God gave this great commandment "Seek."

Britishly sought, via more than ten thousand references, is the mass of c'inical and epidemiological data on the streptococci with which Drs. Ross and Ross are completing a nine or ten volume bacteriological encyclopedia. Five volumes have already been printed. Three more will follow as well as two atlases of photograph.

This, the fifth volume, tome sized and paper covered, consists of three monographs, viz.: The Role of the Streptococci in Erysipelas, The Role of the Streptococci in Skin Diseases, The Role of the Streptococci in Measles. There are sixteen hundred references.

Practically all of the observations ever made concerning the role of the streptococci in the three diseases are incorporated in "an attempt to epitomize, classify and correlate the thousands of research papers published by workers all over the world." Included are summaries of articles by the following local investigators: Rigney D'Aunoy, R. J. Hibbard, Charles Duval and John Musser.

Believing in the efficacy of an improved standardized Crowe's medium which serves as means for accurate differentiation of the "multifarous species of streptococci," and in the value of their thousands of photographs of streptococci already taken it is the author's prediction and promise that with the completion of their work they will be able to arrange the species of streptococci into twenty or thirty groups each of which will be divided into about ten varieties.

MAURICE SULLIVAN, M. D.

A'lergy: By Warren T. Vaughan, M. D. St. Louis, C. V. Mosby Co. 1931. pp. 359.

The number of books on allergy are increasing very rapidly. This book of Vaughan's is a worthy contribution to the subject. It contains a tremendous amount of information on allergy in a condensed form. It is an excellent quick reference book, and will no doubt become a standard textbook on allergy.

B. G. EFRON, M. D.

The Diagnosis and Treatment of Venereal Diseases in General Practice: By L. W. Harrison, D. S. O., M. B., Ch., F. R. C. P. E. 4th ed. London Oxford University Press. 1931. pp. 567.

As the title implies, the text is written chiefly for the general practitioner as it is impossible to cover the whole subject of venereal diseases in so small a volume in minute detail.

The author very beautifully covers the differential diagnosis between syphilis and a number of skin conditions with very lucid descriptions and photographs.

He stresses the necessity of the dark-field examination for treponema and the staining of smears from urethral discharges for diagnostic purposes.

In his treatment of the different conditions he describes the different drugs used in considerable detail, stressing the value of the different drugs with reference to the results he has obtained. The

manner and types of treatment are described in as great detail as the space would allow, but are not as complete as his diagnostic procedures.

MONROE WOLF, M. D.

Female Sex Hormonology: By William P. Graves. Philadelphia, W. B. Saunders Company. 1931. pp. 131.

This is a small compact, well written and arranged review of the entire subject matter in reference to the female sex hormone. The author, as indicated in the preface, has attempted to collect past and recent accomplishments in the researches on this important hormone. The purpose is most admirably accomplished, as the paragraphing, consideration of subjects, and the supplying of data up to date is characteristic of the book throughout its composure. This book would interest workers in this special field of medicine and surgery, and could easily serve as a wonderful reference book for students and others of the medical profession interested in same.

P. T. TALBOT, M. D.

The Vitamins: By Ethel Browning, M. D. Baltimore, Williams & Wilkins Co. 1931. pp. 575. Price ——. (Monographs of the Pickett-Thomson Research Laboratory, Vol. 1.)

This monograph aims to be a fairly exhaustive survey of the whole field of knowledge of vitamins. They are discussed from many angles; history, occurrence, chemical nature, stability, storage, technic of animal experimentation, physiological effects of deficiency and clinical feature of the deficiency in humans. Dr. Browning has handled an enormous bulk of literature involving countless contradictions with great skill and discrimination. No doubt investigators who have spent years of study on one small phase of the vitamin problem will feel that she ha s not shown the critical insight into certain problems that they, after years of specialized study, possess. One reviewer can hardly be expected to attain such a highly critical grasp of the entire vitamin field. Indeed one may rightly question of the attempt of one person of such an inclusive task. Of course, the single reviewer gives to his presentation a unity which is impossible to a work by many writers. Dr. Browning states in her introduction that she "has had perforce to remain content with the endeavor to weave into a complete pattern those threads which have seemed most important to the continuity of the design." It is debatable whether, in the present state of knowledge of vitamins, a complete pattern should be attempted. However, the reviewer is glad that the attempt has been made. The busy practitioner will find the extensive table of vitamin content of food useful. The physician who wants to know more than a few bare principles will find the monograph fascinating reading. The work will find its greatest usefulness in the hands of the investigator in the vitamin field who will probably use its splendid bibliography in his own problems and will be particularly grateful for this means of obtaining quickly and easily a broad and fairly detailed knowledge of the whole vitamin field. The general arrangement and printing of the book are excellent and the index is conveniently arranged and complete.

R. H. TURNER, M. D.

PUBLICATIONS RECEIVED.

F. A. Davis Company, Philadelphia: Pathology for Nurses, by Eugene C. Piette, M. D. Modern General Anesthesia, by James G. Poe, M. D.

The Macmillan Company, New York: Reconstruction of the Biliary Tract, by Edmund Horgan, M. D., F. A. C. S. Behavior Aspects of Child Conduct, by Esther Loring Richards, B. A., M. D., D. Sc.

P. Blakiston's Son & Co., Philadelphia: Clinical Atlas of Blood Diseases, by A. Piney, M. D., M. R. C. P. and Stanley Wyard, M. D., M. R. C. P.

Paul B. Hoeber, Inc., New York: Italian Medicine, by Arturo Castiglioni, M. D.

The Century Company, New York: Nutrition Service in the Field, Report of the Subcommittee on Nutrition, Lucy H. Gillett, Chairman. Obstetric Education, Report of the Subcommittee on Obstetric Teaching and Education, Fred Lyman Adair, M. D., Chairman. Growth and Development of the Child, Part III Nutrition; Report of the Committee on Growth and Development, Kenneth D. Blackfan, M. D., Chairman.

Harvard University Press, Cambridge: Walter Bradford Cannon—1906-1931.

Wilhelm Maudrich, Publisher, Vienna: The Technique of the Non-Padded Plaster Cast, by Fritz Schnek, M. D.

Lea & Febiger, Philadelphia: A Medical Formulary, by E. Quin Thornton, M. D.

MacCrellish & Quigley Co., Trenton: Fifty-Fourth Annual Report of the Department of Health of the State of New Jersey, 1931.

The University of Chicago Press, Chicago: Midwives, Chiropodists, and Optometrists, by Louis S. Reed, Ph. D. A Survey of the Medical Facilities of the State of Vermont, by Allon Peebles, Ph. D.

The Rockefeller Foundation, New York: Method and Problems of Medical Education.

State of New York, The Department of Health, Albany, 1932: Public Health in New York State.

Montague Hospital for Intestinal Ailments, New York: Psyllium Seed: The Latest Laxative, by J. F. Montague, M. D.